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ORIGINAL COMMUNICATIONS.

NOTES OF A CASE OF DERMATITIS HERPETIFORMIS, EXTENDING OVER ELEVEN YEARS, ILLUSTRATING THE SEVERAL VARIETIES OF THE DISEASE.

BY LOUIS A. DUHRING, M.D.,

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IN the following case the pustular, vesicular, bullous, and papular manifestations of the disease* were all developed on one or on several occasions during the long period the patient was under my observation. The characteristic features of the affection are clearly defined in the history, the notes of which, it may be remarked, were recorded at the time of each examination.

James W., æt. 38, a native of Philadelphia, and a wood-carver by occupation, was admitted to the Philadelphia Dispensary for Skin Diseases, January 16, 1873. According to the notes in the record-book, he was suffering from an imperfectly defined inflammatory, multiform eruption, composed of erythematous spots and patches which had evidently been the seat of previous disease, papulo-vesicles, pustules, and excoriations. It occupied the general surface, with preference for the arms and forearms, sacral region, buttocks, and thighs. The lesions were not very numerous, and were disseminated, except over the sacral region, where a dozen or more formed a conspicuous patch. The disease appeared to be fading away, and, inasmuch as the patient gave a history of having recently had quite active treatment, internal as well as external, and that he had been treated for supposed "secondary syphilis," the diagnosis was for the time being withheld. According to a note, the eruption resembled that resulting from the internal use of the iodide or the bromide of potassium.

He stated that he had been suffering from the disease for five years, and that while better, and even nearly well, at times, it had never entirely left him; it was the source of great annoyance to him, itched considerably, manifested itself in different forms from time to time, and was apt to appear in distinct crops from week to week or month to month. He was not aware that he had ever contracted syphilis, but several physicians had assured him that the present eruption was a manifestation of this malady.

He was placed upon a simple tonic treatment until the diagnosis might be more definitely ascertained.

January 25.—New pustular lesions have appeared on the buttocks and on the thighs. These are highly inflammatory, flat, and incline to crust in the centre and to spread on the circumference. Alkaline lotions and baths were ordered; also a saline aperient.

February 8. — Considerable improvement, the disease being in about the same state as when the patient first came under observation.

February 12.—New lesions are appearing.

February 19.—The disease has been manifesting itself chiefly on the arms and on the buttocks, new pustules making their appearance from day to day.

February 24.—No new lesions; condition decidedly better.

March 19.—There has been steady improvement since last note. The remedies used during the past two months have been syrup of the iodide of iron; bitartrate of potassium from time to time; and a carbolic acid lotion.

May 12.—The disease continued improving during the last two months until within the present week, when a crop of new pustular lesions began to appear, scattered here and there over the general surface, especially upon the arms, buttocks, and thighs. The patient enjoys average general health, notwithstanding the eruption, which now is abundant, and is unusually active.

It may be described in its present state as a pustular form of disease, the lesions beginning as pin-head and split-pea sized, flat *pustules* with extensive, bright-red areolæ. They increase rather slowly in size, and soon begin to crust over with a yellowish-brown crust, after which they continue to increase in size by new, small, flat, pin-head sized pustules forming on the periphery. This process goes on until the

* For an account of Dermatitis Herpetiformis the reader is referred to my paper read before the American Medical Association, May 6, 1884, abstracts of which may be found in *New York Medical Journal*, p. 562, May 17, 1884, and in *Philadelphia Medical Times*, p. 603, May 17, 1884.

lesions assume the size of a dime or quarter-dollar, when it ceases and a crust covering the whole remains. The crust is adherent from the beginning; if detached, it shows a circumscribed, superficially excoriated surface, covered with a puriform fluid. Later, at the end of two or three weeks, the crust drops off, leaving a dark-red, infiltrated spot, but no scar. These inflammatory infiltrations are slow to disappear, weeks being necessary for the larger ones to become effaced.

About the buttocks and sacral region and on the thighs the lesions show a disposition to occur in patches, and, moreover, to group, two or three not infrequently existing in such close proximity as ultimately to run together. Over the arms and elsewhere this tendency is not so noticeable; nor are the lesions here so well defined and large as on the back and thighs.

May 26.—The outbreak was at its height when the last note was recorded, since which date the eruption has been steadily declining.

November 3.—The patient has absented himself for six months. He states that he continued to improve through the summer, and that only within the last two months has the disease again become annoying. He was almost free from eruption at one period during the summer. Lately the disease has manifested itself in another form, the lesions being decidedly papular rather than pustular, and in distribution more scattered than formerly, and also much more itchy. Upon examination, the eruption was seen to have changed its character completely and to consist of disseminated, here and there distinctly grouped, variously sized and shaped, imperfectly formed *papules* and *papulo-vesicles*, which closely resembled eczema. He was again placed upon a preparation of iron, and a saline aperient, the bowels being habitually constipated.

November 18.—The eruption has entirely disappeared, leaving the skin pigmented in dirty-yellowish, brownish spots and patches, and in some places deprived of the normal pigment, dirty-whitish patches existing.

March 3, 1874.—Four months have elapsed since the last note. The disease has during this period been "better and worse." There have been several relapses, which have continued a fortnight or longer and have disappeared as before. The patient has taken arsenic in the form of liq. potass. arsenit. in from two- to four-minim doses, but without benefit. Of late he has been using strong drink in excess, which, he states, is pretty sure to cause an exacerbation of the eruption. A new crop of lesions is to-day making its appearance. The character of the disease has again changed, the lesions now being *vesicular* and *pustular*, especially the latter, similar to the form of eruption that existed a year ago. The single lesions resemble ecthyma, while those in groups or patches bear a close resemblance to pustular eczema.

March 13.—New lesions are here and there manifesting themselves, the neck, lower portion of the back, buttocks, thighs, and arms being the regions chiefly invaded. Iron and arsenic are still being taken, and various antipruritic lotions and ointments have been employed, with, however, but little benefit.

April 3.—The pustular character of the eruption has ceased, and variously-sized herpetic *vesicles* and small *blebs* have lately developed. Many of them are as large as split peas. They appear quite suddenly and are very itchy. The disease has lately attacked the folds of the axilla and the pubes, which regions have become extensively crusted.

April 24.—The surface has again cleared off, only a trace of the former eruption remaining, in the form of primary lesions, but scratch-marks and pigmentation are everywhere present, the whole integument having a dirty, muddy, mottled look. Has been taking arsenic steadily; general health has remained good.

April 30, 1877.—Three years have elapsed since last note, and since the patient has been seen. The disease still exists, with the same history as formerly, the lesions being variable, papules, pustules, and vesicles occurring from time to time. During the past six weeks there have been several slight relapses and again a change in the character of the lesions, indistinctly defined, flat, variously sized and shaped *papules* appearing together, with here and there ill-defined abortive *pustules* and *papulo-pustules*. These lesions now exist. The patient considers himself, upon the whole, considerably improved. He has been taking the arsenic from time to time, in varying quantity, from one to five minims thrice daily.

January 15, 1879.—A year and a half has passed since the patient was last examined. He states that he has but little change to report. He has not been free of the eruption, and has had two very severe attacks and many slight ones. The severer attacks have continued three or four weeks, while the lighter ones come and go from week to week. He has had the eruption so constantly of late that no particular note has been made as to the occurrence of distinct outbreaks. The lesions have been coming and going without intermission. Within the year the lesions have been for the most part *vesicular* and *bullous*, or, as he expresses it, "they have been blisters of various sizes, containing a clear fluid." They have had a disposition to cluster, but there have also been many isolated, single lesions. They have been very itchy, so much so that he lost no time in scratching and rupturing them. He does not know whether they ever ruptured spontaneously, for he has invariably opened them as soon as they appeared. Lately all regions of the surface, except the palms and soles, have been attacked, the scalp even being the seat of numerous lesions, but preference is still shown for the regions before invaded.

March 2, 1879.—During the past two months he has been better than usual, the most annoyance being due to considerable eruption, vesico-pustular in character, about the scrotum. He has been drinking of late, with the hope, he states, of "bringing out the disease," but thus far without success. He has been better this winter than during any period within the past ten years. He is positive that the various forms of treatment employed have had little or no influence in controlling the disease. He is about as free of the eruption in summer as in winter, the seasons exerting no special influence upon his condition. His general health remains fair, although, owing to his irregular mode of life, he is dyspeptic, and, as a rule, is constipated.

DEATH FROM CHLOROFORM.—A physician, Dr. Godfrey MacRae, placed himself recently under the charge of Prof. Annandale, of Edinburgh, for the removal of a tumor in his neck. "While the chloroform was being administered prior to the necessary operation, Dr. MacRae, who was in the prime of life, suddenly died."—*Medical Press and Circular*, June 18.

REPORT ON RECENT PROGRESS IN PHYSIOLOGY.

BY ROBERT MEADE SMITH, M.D.,
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THE FUNCTIONS OF THE INTRAVERTEBRAL GANGLIA.

THE classical experiments of Waller have shown that after division of the posterior roots of the spinal nerves, only that portion of the root still in connection with the spinal cord undergoes degeneration, while, when the anterior spinal roots are divided, degeneration occurs in the peripheral portion of the divided root. These experiments are universally held to prove the existence in the spinal cord of a trophic centre for the anterior spinal roots, and that the ganglion in the posterior spinal roots exerts a trophic influence over these roots both towards the spinal cord and towards the periphery.

P. Vejas (*Centralb. f. d. Med. Wissen.*, May 3, 1884) has, however, recently published some results obtained by experiments on animals, which, if confirmed, will necessitate a modification of the views of Waller above alluded to. He has found that, after section of the posterior root, not only does the portion in connection with the spinal cord degenerate, but the fibres in the portion of the root between the point of section and the ganglion, and in the ganglion itself, disappear, while the ganglion-cells remain perfectly normal: and when the peripheral sensory fibres are divided on the far side of the ganglion, the latter itself degenerates. If these results are correct, the function of the spinal ganglia is not as clearly established as is generally supposed.

On the other hand, experiments reported by Bechterew and Rosenbach, in the *St. Petersburger Med. Wochenschrift*, April 17, 1884, extend still further the views of Waller as to the trophic functions of the intravertebral ganglia, and show that division of the posterior spinal roots between the ganglia and the spinal cord causes extensive degenerative changes in the latter.

These experiments were performed by dividing all the spinal roots in dogs which go to make up the *cauda equina*, with a resulting anæsthesia of the tail, perineum, and inner surface of the hind legs, disordered gait, and paralysis of the tail and sphincters. In most cases

the animals died within four weeks, but some survived for two or three months and were then killed.

Examination after death showed in all cases, at the point of section, a limited inflammatory adhesion of the *cauda equina* with the spinal membranes, while microscopic examination of the central end of the divided posterior roots showed the well-known degeneration of the nerve-fibres with connective-tissue increase.

In the spinal cord itself an intense and extensive degeneration (vacuolization, atrophy, granular degeneration, and disappearance) was noted in the nerve-cells of the gray substance of both the anterior and posterior horns.

This degeneration was most marked in the lumbar enlargement of the cord, but extended with decreasing intensity throughout the entire length of the cord: degenerated ganglia-cells were even found in the nuclei of the medulla oblongata. The network of the gray substance in the inferior portions of the spinal cord appeared swollen and opaque, but without any distinct textural alterations, and there was also partial degeneration of the intramedullary prolongations of the posterior spinal roots, and occasionally, also, of the anterior roots.

In the cases in which the above-described alterations of the gray matter were most marked, as in cases where the division was practised higher up the cord, alterations were also noted in the white columns of the cord. In the inferior portions of the cord there was diffuse degeneration of the posterior columns. In the lumbar enlargement it was confined to the columns of Goll, and gradually decreased as the upper portions of the cord were reached. The degeneration of the prolongation of the posterior roots extended upward in the form of small bundles in front of the gelatinous substance of Rolando. A few nerve-cells in the cerebellar columns had also been the seat of degenerative changes.

The authors believe that they have been able to exclude all inflammatory processes in the production of the above results, and think that they are attributable to the disturbance of some trophic processes exerted on the cord by the intravertebral ganglia, while the degeneration of the columns of Goll and other ascending white columns is secondary.

Their investigations, therefore, prove that the separation of a number of intravertebral ganglia from the spinal cord produces a trophic disturbance in the ganglionic elements in the gray matter of the cord, most marked in the segment of cord whose posterior nerve-roots have been divided, and extending with diminishing intensity through the gray columns of the entire cord. Consequently, the intravertebral ganglia are to be regarded as the trophic centres of the nerve-cells of the gray matter of the spinal cord.

THE FUNCTION OF LIEBERKÜHN'S FOLLICLES IN THE LARGE INTESTINE.

Klug and Koreck (*Centralb. f. d. Med. Wissen.*, April 26, 1884) report the results of experiments performed on dogs with fistulæ of the large intestine, made in the same manner as the Vella modification of the Ludwig-Thiry fistula of the duodenum; that is, after opening the abdominal cavity, a portion of the large intestine, about ten centimetres in length, was exsected without injury of its blood-supply, the continuity of the bowel restored, and the two ends of the exsected portion of the gut united with the edge of the wound in the abdominal walls. Consequently, animals so operated on could normally digest food, while an isolated loop of large intestine was accessible for experiment.

The authors found that starch and fibrin introduced into the large intestine in gauze sacs was unaltered, and did not lose in weight: digestive action on these substances in the large intestine could therefore be excluded. No secretion could be produced by pilocarpine injections, while the contents of the intestine after killing the animals was a clear, inodorous, gelatinous mass of neutral reaction, only slightly soluble in water, and containing mucin and albumen. The extract of this mass exerted no digestive action on fibrin, starch, or oil.

On the other hand, they were able to establish clearly the absorbing power of the large intestine for oils; as, after the administration of milk and olive-oil, the cylinder-cells of the Lieberkühn follicle were filled with oil-globules. The authors consequently agree with Hoppe-Seyler in regarding these follicles, not as glands, but as mere extensions of the absorbing surface.

THE ACTION OF INFUSED BEVERAGES ON PEPTIC DIGESTION.

The important subject of the influence

of the infused beverages of every-day use on the rapidity and completeness of the digestion of food by the stomach has been considerably advanced by an important paper published by Dr. James W. Fraser in the *Journal of Anatomy and Physiology*, vol. xviii., part i.

From the fact that experiments having for their object the determination of the effect of different beverages on peptic digestion could only be carried out with an artificial digestive fluid, it is evident that the actions of the beverages on the vital processes of digestion, such as the secretion of the gastric juice, its amount and quality, and on the muscular movements of the stomach, are, by the nature of the experiment, ignored, although such points must be of the greatest influence on the result. Dr. Fraser's paper is confined to the discussion of the chemical action of a fixed quantity of a beverage on the digestion of a fixed quantity of meat by a fixed quantity of an artificial gastric juice of a definite composition. He finds that all the infused beverages retard the digestion of all meats which were subjected to experiment, with four exceptions,—viz., white of egg and ham in presence of coffee, and fish in presence of cocoatina and of cocoa. Under this general rule some exceptions were noted,—viz., that tea and coffee have much less action on the meats usually eaten at breakfast (egg, salt beef, and ham) than on other meats; that coffee has less action on these meats, as a rule, than tea; that cocoatina has more retarding action than either coffee or tea, and the same subdivision into a class of breakfast meats and a class of others is noticed, but less markedly than with tea and coffee; and that cocoa and chocolate retard the digestion of meats more than any of the former beverages, and no subdivision into two classes of meats is to be noticed in their case.

In his attempt to explain the causes which lead to this retardation of digestion, the author believes that tea reduces peptic action chiefly by its tannic acid, which acts by coagulating the albuminoids which have escaped the action of cooking, by tanning the gelatinous parts of the meat and causing them to contract and press on the albuminoids, by removing the pepsin itself entangled in the precipitates formed, and by precipitating syntonin and peptone as formed.

The action of coffee appears to be in the direction of favoring the digestion of ham and white of egg, and this must depend upon the power of the alkaloid to assist proteolytic action; but coffee, as a rule, retards the digestion of meats, and this must be caused by the caffeo-tannic acid and by the volatile oil.

The action of cocoa appears to be in some respects intermediate between those of coffee and of tea. The action of its acid is slightly greater than that of caffeo-tannic acid, but that of the volatile oil is less than that of the volatile oils of tea and coffee. But then the suspended matters of the cocoas give rise to the causes which produce the most important results in these experiments,—viz., the accumulation of peptones and the clogging action of the suspended solids; and neither of these would act in the case of digestion in the stomach, for the peptones would probably be absorbed as quickly as they are formed, and the clogging would be prevented by the stomach movements.

In retarding the consumption of acid during digestion, tea has the greatest effect; coffee has no more effect than water, and cocoa increases the consumption. Coffee and cocoa cause the peptic digestion of albuminoids to pass on through the stage of peptones to the formation of leucine and tyrosine.

Tea acts on the digestion of fresh meat so as to increase the production of flatus, but has no such effect with salt meat, and coffee has no more effect than water.

The addition of cream and sugar to the beverages reduces the retarding action of tea on digestion, but increases that of cocoa; and coffee appears to have its action reversed by these additions.

As regards the practical conclusions to be drawn from these experiments, it may be stated that if, at any meal containing albuminoid matters, one of these beverages be drunk instead of water, a reduction in the amount of peptone produced will occur: therefore, as such beverages decrease the nutritive value of foods, a larger amount of food is required to preserve the nutritive balance, and, by the amount of undigested matter which remains in the stomach, dyspepsia is apt to be produced.

The cocoas yield more nourishment than the coffees and teas, and it may be believed that, owing to the mixing action of the movements of the stomach, they

retard digestion as little as any infused beverage. They are therefore most suitable to cases where economy must be practised in the amount of food taken.

In the case of dyspepsia, besides the action of the beverages in precipitating albuminoids, if of the flatulent order, tea should be avoided when unsalted animal food is eaten, on account of the increase of flatus following their digestion together. In such cases, therefore, coffee would be the best beverage.

In acid dyspepsia, tea, from its power of reducing the consumption of the acid, is the worst beverage; coffee is neutral, and cocoa would be the best from its increasing the consumption of acid; though, if there is any tendency to the lactic acid fermentation, cocoa should be avoided on account of the sugar it contains.

As regards the time of using infused beverages, manifestly they should not be taken at meals which consist largely of animal food. This requirement has come to be very generally followed out, and most people make this undesirable combination only at breakfast; and Dr. Fraser has shown that the usual breakfast meats are those least acted on in digestion by tea or coffee, the latter, under such circumstances, being preferable.

A CONTRIBUTION TO THE PHYSIOLOGY OF THE PHRENIC NERVES.

Until now the phrenic nerves have been considered solely as the motor nerves of the diaphragm; but a recent communication of Von Anrep and Cybulski (*Pflüger's Archiv f. d. ges. Physiologie*, February 4, 1884) shows that the contested question as to the presence of sensory fibres in these nerves must be regarded as settled in the affirmative, since irritation in animals of the central ends of these nerves produces changes in the circulation and respiration, and often evidences of painful sensations.

Influence of the Phrenic Nerves on Respiration.—Irritation of the central end of a divided phrenic nerve in the dog, rabbit, or cat produces changes in the number and depth of the respiratory movements, which differ according to the strength and duration of the irritation. Thus, weak and short irritations (five to ten seconds) produce a slight increase in the rate of respiration, while longer irritations (twenty-five to fifty seconds) at first accelerate and then retard respiration, while the depth of the individual respiratory movements is augmented. With stronger irritations, increase in strength and rapidity of respiration at first occurs, which gives place to a retardation; or the respiration may again become normal, and then even a further increase in the strength of the irritant is without effect. This proves that the sensory fibres of the phrenic nerves rapidly lose their irritability. In exceptional cases, irritation of these nerves in the neck produces expiratory arrest of respiration. These results are not modified by narcosis or by previous section of the vagi and superior laryngeal nerves.

Influence on the Blood-Pressure.—The first effect of the irritation of the central end of the phrenic nerves is to cause a considerable increase in the blood-pressure, which soon disappears; a second increase again is produced, and the normal pressure again regained, and so on. In other words, a curve is produced which is precisely similar to the so-called "Traube-Hering's curve." This result was not interfered with by section of the cardiac nerves in the neck or by opening the thoracic or abdominal cavities. But it was found that, when the functional activity of the vaso-motor centre was depressed, as by the administration of cadmium salts, or when the spinal cord was divided, these blood-pressure oscillations did not appear. It is, therefore, clear that these modifications of blood-pressure are due to the rhythmic increase in the tonic function of the vaso-motor centre produced by stimulation of the phrenic nerves.

When the phrenic nerves are stimulated, the vagi nerves being intact, in the ascending limb of the pressure-curve, there is an increase in the rate of the heart's pulsation, and a slowing of the pulse in the descending limb, entirely analogous to the phenomena noticed in respiratory changes in the blood-pressure. When the vagi are divided, there is no change in the number of the heart's beats: consequently, there must be a periodic stimulation of the inhibitory centre as well as of the vaso-motor centre.

The points of interest in the above communication are the periodic increase in the tonus of the vaso-motor centre, in animals with normal respiratory gas changes, produced by the stimulation of a single nerve; and the function which is thereby proved to be possessed by the phrenic nerve in regulating the adjustment

of respiratory movement and blood-pressure, possibly through the stimulation of its sensory fibres by the periodic contraction of the diaphragm.

THE ORIGIN AND DEVELOPMENT OF THE RED BLOOD-CORPUSCLES.

Prof. Bizzozero and Dr. A. Torre (*Virchow's Archiv*, Bd. xcv.) find in all adult vertebrates a continuous development of red blood-corpuscles through indirect division of previously existing, earlier forms; and, further, that in all such animals there exist special organs, one of whose functions may be regarded as being the seat in which the development of new red blood-corpuscles occurs. In mammals, birds, reptiles, and tailless amphibians, the bone-marrow represents this special organ; in the tailed amphibians it is the spleen, and in fish the spleen and the lymphoid parenchyma surrounding and constituting part of the kidney.

In the lower vertebrates (reptiles, amphibia, and fishes), the circulating blood possesses the characteristic, seen in the embryonal stage of all vertebrates, of containing young red blood-cells and others in the process of indirect fission. Both these forms of cell, however, are found in less numbers in the circulating blood than in the organs which in the different species of animals serve as the nidus of development of the red cells. This reminiscence of the embryonal state is more clearly seen in animals which have been subjected to repeated blood-letting; while, on the other hand, it becomes less evident or may even disappear under conditions which depress the general activities of the organism, such as confinement and deprivation of food.

Prof. Bizzozero further disputes as purely hypothetical the hæmatoblast theory of Hayem and the assumption that the white blood-corpuscles develop into red.

As regards the development of red blood-corpuscles in adult forms, he claims to have observed under the microscope the division of the red blood-disks by kariokynesis, and finds in this process the source of new blood-cell formation, the resulting form being what he terms young blood-cells. From the earliest stage of embryonal life there is no period in which this form of division of the red blood-disks is not constantly occurring, the activity of the process depending on the greater or less need of the system for new red blood-cells. In the embryonal stage of mammals the red blood-corpuscles multiply in this manner in the circulating blood, in the liver, in the spleen, and in bone-marrow, while the last-named organism preserves the function of serving as a nidus for new blood-cell formation throughout the entire life of the organism.

In the frog, the kariokynesis is confined to the bone-marrow; in the embryo of the chick it at first occurs in the circulating blood, then in the spleen, and finally in the bone-marrow, where it is continuous. Thus, with the exception of the liver, which is inconstant in possessing this function in birds, the stage and localities of development are the same in the bird as in mammals.

THE FIRST DERIVATIVE PRODUCTS OF ALBUMINOIDS.

From his earlier studies, Kühne was led to the conclusion that the albuminoid molecule was composed of two preformed groups, *antialbumid* and *hemialbumin*, which, under the action of the gastric juice, are converted into the corresponding peptones, but which differ in their resistance to peptic digestion. Between these albuminoids and their respective peptones occur, as intermediate stages in gastric digestion and in the action of simple acids, *antialbumose* and *hemialbumose*. Further, the two peptones differ in their behavior to *trypsin:* thus, hemipeptone is split by the action of trypsin into leucine and tyrosine, but an insignificant amount of peptone remaining unchanged, while the antipeptone remains entirely unaffected in pancreatic digestion.

Kühne and Chittenden (*Centralbl. f. d. Med. Wissen.*, May 10, 1884) have carried these studies considerably further, and publish an elaborate account of the properties of these bodies* and of the means of isolating them from egg-albumen, serum-albumen, and syntonin. Their chemical composition they place as follows:

	Anti-albumid.	Anti-peptone.	Hemi-albumose.	Hemi-peptone.
C. . .	53.79	49.87	50.96	49.38
H. . .	7.08	6.89	6.85	6.81
N. . .	14.55	15.21	15.88	15.07
S. }	24.58	28.03	1.45	1.10
O. }			24.86	27.64

With the exception of the antialbumid, the C. is in much smaller proportion in

* See page 710, *ante*.

these bodies than in other albuminoids, a fact which is in harmony with the conception of these bodies as hydrates of albumen.

Antialbumid is best obtained by prolonged heating at 100° C. of coagulated, washed white of egg, with 0.5 per cent. H_2SO_4, washing with water and digesting with gastric juice, in which it is insoluble but is converted into a gelatinous body. If then treated with trypsin in soda solution, it is converted into antipeptone, which may be precipitated with alcohol. Trypsin is incapable of converting this form of peptone into leucine or tyrosine.

Antialbumose cannot be obtained by the action of acids alone, but only by fractional peptic digestion. When formed, it is readily converted into antipeptone by the action of trypsin.

Hemialbumose and hemipeptone are obtained by a short, continued action of gastric juice on coagulated albumen and subsequent neutralization, filtration, drying, and precipitation and washing with alcohol. If the precipitate is washed with cold water, peptone and a part of the hemialbumose pass into solution.

These products are obtained in a similar manner from serum-albumen.

TOXIC EFFECTS OF COCCULUS INDICUS ON MAN: WITH A COMPARISON BETWEEN STRYCHNIA- AND COCCULUS-INDICUS-POISONING.

BY FRANCIS L. HAYNES, M.D.

IN 1879, while a medical student, I witnessed and noted the following unjustifiable experiments, made by M. J. For obvious reasons, the name of the experimenter is withheld; but I can vouch for the accuracy of the report.

The preparation used was a tincture, made by percolation, with six ounces of powdered cocculus Indicus, and one-half ounce of tartaric acid, to the pint.

I.—Adult male. Beginning with a small dose, the quantity was gradually increased until one ounce daily was taken, and this was continued for two days. The only effect was slight subjective vertigo, lasting about half an hour, each morning. He felt, to use his own words, as if "his head were turning around."

II.—Boy, aged 12. The dose was the same as in the first experiment, and produced a similar effect.

III.—Adult male. When two ounces a day in divided doses were taken, severe frontal headache became an almost constant symptom. After taking this quantity for three days, three epileptiform convulsions occurred, at intervals of fifteen minutes. Two hours after the last convulsion I saw him. He was vomiting violently, and unable to recognize any one. This man, however, confessed to having taken the medicine from the bottle without measurement.

IV.—Male, aged 35. After taking three ounces daily for four days, he uttered an inarticulate sound, became convulsed, and would have fallen had he not been quickly seized and placed in bed. There he became rigid, with head bent back and lips blue. These symptoms lasted for a few seconds.

Thirteen minutes after the first convulsion, I visited him, and carefully watched his symptoms until he recovered. His face presented a wild expression, and he either failed to answer questions, or did so inarticulately. He vomited his dinner, which he had eaten about half an hour previously.

In twenty-two minutes, the hands began to jerk, then the arms, then the head and feet. In twenty-five minutes, the jaw was pulled downward and the head drawn firmly backward, the chest became rigid, the forearms flexed at right angles with the arms, and the legs straightened out stiffly. At the same time the whole body jerked violently, and the lips became black. The pupil was unchanged. The whole paroxysm lasted but a few seconds. He now remained relaxed and motionless for two minutes; then the jerking motions already described were noted, and continued for one hour. Consciousness was lost during the convulsion, and did not return for fifteen minutes. Another attack of vomiting, profuse perspiration, and frontal headache, were subsequent symptoms. He was able to sit up the next day, but complained of weakness and headache.

To sum up, cocculus Indicus in moderate doses produced subjective vertigo; in larger doses, severe frontal headache, and, if continued, terrible epileptiform convulsions, followed by vomiting.

The following table presents the com-

parative results of the administration of strychnia and cocculus Indicus to man:

STRYCHNIA.	COCCULUS INDICUS.
1. All stages of strychnism may be produced at will by the careful regulation of the dose.	1. When a sufficient quantity has been taken, violent convulsions occur, without definite warning. They are explosive.
2. The patient is perfectly conscious during the convulsion.	2. The patient is entirely unconscious during and after convulsion, as in epilepsy.
3. The convulsions are mainly tonic, as in tetanus.	3. The convulsions are *mainly* clonic.
4. Never causes vomiting.	4. Frequently causes vomiting.

REFERENCES.

Sozinskey (*Philadelphia Medical News*, November 3, 1883) makes some interesting remarks, and gives a fatal case, the principal symptoms of which were epileptiform convulsions, with vomiting and purging, and which was treated with morphia hypodermatically. He states that no other fatal case is on record; but one can be found in Mitchell (*Therapeutics*, Philadelphia, 1850, 312) which is almost the counterpart of Sozinskey's case.

W. B. Thompson (*Medical Examiner*, N. S., v. 227) records an instance in which the application of a strong tincture of cocculus to the scalp of a child six years old was followed by tetanic convulsions and contracted pupils, and resulted in death.

J. Crichton Browne, of Wakefield, on "Antagonism between Picrotoxin and Chloral," shows that these drugs are antagonistic within certain limits. See also *New Remedies*, October, 1875.

On general principles, chloral or chloroform is worthy of trial in cocculus-poisoning.

280 East Cumberland Street, Philadelphia.

New York State Pharmacy Law.—Governor Cleveland having signed the State Pharmacy Bill, hereafter every pharmacist and druggist in the Empire State must be either a graduate in pharmacy or a licentiate. A board, consisting of five representative pharmacists, to be known as the State Board of Pharmacy, will be appointed at once. The New York State Pharmaceutical Association, at its meeting on June 10, nominated ten candidates for the position, from which the Governor will select five to constitute the Board.

AN EXPERIMENTAL RESEARCH ON THE UTERO-PLACENTAL CIRCULATION.

BY J. P. PYLE, M.D.

(Continued from page 715.)

OBSERVATIONS ON SEPTICÆMIA IN PREGNANT ANIMALS.

A SECOND series of experiments will now be detailed,—*i.e.*, those undertaken with the idea of transmitting minute fungi (micrococci) from the mother to the fœtus by producing artificial septicæmia in the mother.

Experiment XX.—Some purulent matter was injected into the subcutaneous tissue of a pregnant rabbit. On the third day following, the animal died from septic poisoning. About one hour after the animal died, a post-mortem examination was made. The blood of the mother was found to contain the micrococci. A slide was prepared by dipping one end into the left ventricle of the heart immediately after cutting it open sufficiently for that purpose. The blood so obtained was found crowded with the fungi. The organs of the mother were not examined, but the fœtuses, two in number, gave the following results. First fœtus, the liver, spleen, and kidney were the only organs examined. In all the sections made from these tissues minute objects were seen, which were proved to be micrococci. Second fœtus, the spleen, lung, heart, and thymus gland were examined. In each instance the fungi were found. The placenta also contained them. Cord not examined.

Experiment XXI.—A pregnant rabbit was inoculated in the trachea with erysipelatous matter. On the fifth day the animal died from septicæmia. A post-mortem examination was made almost immediately after death. The blood of both mother and fœtuses was found swarming with micrococci. Examination of the fœtuses gave the following results. First fœtus, brain the only organ examined. It contained the micrococci. Second fœtus, the lungs of this one contained micrococci. Third fœtus, the liver and spleen of this one contained micrococci. Fourth fœtus, sections of the extremities showed the micrococci. Placenta and cord both contained the fungi, the latter showing them very distinctly. The vessels being large, the blood-corpuscles having dropped out, the micrococci could be plainly seen adhering to the vessel-walls.

Experiment XXII. — Some diphtheritic false membrane was placed beneath the skin on the back of a pregnant rabbit. In four days the animal died from septic poisoning. But a short time intervened between the death of the animal and the post-mortem examination. Micrococci were found swarming in the blood of the mother; fœtal blood not examined. The fœtuses, five in number,

were all examined, and all found to contain micrococci, they being lodged in the various tissues of the body. They were also present in both placenta and cord.

Experiment XXIII.—Placed some putrid matter in the side of a pregnant rabbit. Five days later, the animal died from septicæmia. Animal examined a few minutes after death. Both maternal and fœtal blood contained the micrococci, the white blood-corpuscles in many instances being full of them. The fœtuses, three in number, all contained the micrococci. They were also found in the placenta. Cord not examined.

Experiment XXIV.—About a drachm of erysipelatous matter was introduced into the side of a pregnant rabbit. Five days subsequently the animal died from septic poisoning. Both the maternal and the fœtal blood contained micrococci. Examination of the fœtuses, five in number, all contained the micrococci, as did the placenta and cord.

Experiment XXV.—Some erysipelatous matter was placed in the deep cellular tissue of a pregnant rabbit. Four days subsequently the animal died from septic poisoning. An examination gave the following results: both maternal and fœtal blood contained the micrococci. They were also found in each of the five fœtuses, the livers especially being full. Placenta not examined.

Experiment XXVI.—A piece of false membrane from a case of diphtheria was placed beneath the skin of a pregnant rabbit. On the third day following, the animal died from septicæmia. Both the maternal and the fœtal blood contained micrococci. Sections made from the fœtal tissues showed a wide distribution of the fungi. Placenta and cord also contained them.

Experiment XXVII.—A pregnant rabbit was inoculated with some erysipelatous poison. The animal died in four days. Both the maternal and the fœtal blood, examined soon after death, contained the micrococci. In each of the five fœtuses they were also found in profusion. Placenta and cord both contained the fungi.

Experiment XXVIII.—Some decomposing pus was injected beneath the skin of a pregnant rabbit. Animal died on the third day. Both maternal and fœtal blood contained the micrococci, they being, as noted in some previous cases, crowded in the colorless corpuscles of the blood. The fungi were found in the tissues of all three of the fœtuses, being present as well in the placenta and cord.

Experiment XXIX.—Some erysipelatous matter was placed under the skin of a pregnant rabbit. Five days subsequently the animal died from septic poisoning.

Post-Mortem Examination, one hour afier death.—Blood of both mother and fœtus crowded with micrococci. The fœtal tissues also contained the fungi, as did the cord. Placenta not examined.

CONTROL EXPERIMENTS.

To see whether or not micrococci would arise spontaneously in pregnant animals killed without inducing septicæmia, I procured two additional pregnant animals to test this point. My notes concerning these experiments read as follows:

Experiment XXX.—A large rabbit, far advanced in pregnancy, was killed by puncturing the medulla oblongata. Immediately a careful examination was made of the maternal blood, taken from the heart of the animal, also from the placenta and cord. Each of the six fœtuses was examined by the same methods as were adopted in previous experiments. No trace of micrococci or any other fungi could be discovered in any of the preparations made, nor could I find any extraneous or accidental contamination, like particles of blue material.

Experiment XXXI.—A large, pregnant rabbit was killed in a similar manner as in the last experiment. The autopsy was purposely delayed eighteen hours. Blood then taken from the animal's heart showed no micrococci. There were, however, some red bacteria and a few bacilli present,—organisms peculiar to putrefaction. The fœtuses were carefully examined, but not a trace of micrococci could be seen, nor could putrefactive fungi be discovered.

OBSERVATION IN MAN.

In this instance the subject of observation was a pregnant woman, who, in the eighth month of gestation, died from septicæmia, in the lying-in wards of the Philadelphia Hospital. About one hour after the woman's death, in company with Dr. Formad, I attended the post-mortem examination. There were no signs of decomposition, and the body was yet quite warm. The fœtus was removed by Cæsarean section, and nothing abnormal could be discovered, except that it appeared colder to the touch than the maternal parts, which was taken as evidence that it had died before the mother. An immediate examination of the maternal and the fœtal blood was made, and they presented absolutely identical appearances, which were as follows. Excess of white blood-corpuscles, rather more evident in the fœtus. In each case a small amount of precipitated fibrin was observed, as well as multitudes of micrococci. These were partly in zoöglea masses, partly free or infecting the white blood-corpuscles. A few chains of micrococci could also be seen. The blood was also examined by

Dr. Formad and other physicians then present. Tests were subsequently applied to be sure that the objects in question were micrococci and not granular or extraneous matter. The examination was made with a twelfth immersion lens. Portions of the organs of both mother and fœtus were immediately immersed in alcohol, and, subsequently, sections were made and mounted. The details of the examination are briefly as follows. The blood of both mother and fœtus was first inspected: a small quantity was carefully taken from the cavity of each heart by dipping in, through an opening made, a glass slide. The blood was proved to be profusely infested with the micrococci. Of the maternal organs examined, the heart, liver, and kidneys all contained the micrococci. The tissues of the fœtus showed, by a microscopical examination, an abundance of micrococcus emboli identical with those of the mother. In the tongue, liver, and lung were found the micrococci; even the small vessels of the ear were filled with a granular matter which, under a higher power and by means of appropriate tests, was proved to be the same species of bacteria-micrococci. They were also found clinging to the capillary walls of the umbilical cord.

In connection with this evidence that solid particles may pass from the mother to the fœtus by the placental circulation, I desire to quote a remarkable case of Prof. Friedrich, of Heidelberg, described by him in *Virchow's Archiv*, vol. xxxvi. p. 465. It concerns a case of metastasis of a malignant growth from the mother to the fœtus. The case in question concerns a pregnant woman, æt. 37, who came under Prof. Friedrich's observation. The clinical diagnosis was cancer of liver, with metastasis to the skin, bone, mammary gland, uterus, ovary, serous membranes, thyroid, and lymphatic glands. The patient was in a very low condition, but gave birth to a child at full term. She died on the ninth day following delivery. The child, a boy, was also affected with a tumor about the size of a walnut, situated in the subcutaneous connective tissue at the knee. It died on the sixth day following its birth. The autopsy confirmed the above clinical diagnosis, revealing large cancer-masses in the liver and smaller ones in the other organs, as above mentioned.

On the whole, I do not agree with Prof. Friedrich in calling the liver-tumor primary under the circumstances given; but this does not interest us at present, and, again, it is a question of secondary interest. But what is of primary importance and does interest us just now is the metastasis of the tumor from the mother to the fœtus in utero. As above stated, the child was born with a tumor at the knee, and autopsy of the infant's body showed, in addition, a tumor-thickening of the peritoneum at the entrance of the umbilical cord, the size of which is not given in the record. Microscopic examination made in the Heidelberg Pathological Institute proved the new formation found in the mother identical with those found in the fœtus,—viz., of carcinomatous nature.

SUMMARY OF EXPERIMENTS.

From the above record of my experiments it is seen that the transition of solid particles from the mother to the fœtus is an established fact. An analysis of the experiments shows as follows:

Nineteen experiments were made with the ultramarine liquid. With one exception, I found the blue well distributed in the maternal organs. The total number of fœtuses obtained from these animals was sixty-one. Of these, forty-six gave positive results; *i.e.*, the fœtal tissues were impregnated with blue granules in varying quantity. Only fifteen of these fœtuses gave negative results; *i.e.*, blue granules were not found. Of the placentas, only fifteen were examined,—thirteen of these showing blue granules and two giving negative results. Of the thirteen umbilical cords examined, eight gave positive and five negative evidence.

It is also seen that ten experiments were made with septic poisonings, with the object of studying the transition of bacteria from the mother to the fœtus. The maternal tissues were in every instance impregnated with bacteria. Of the thirty-nine fœtuses examined, in every one identical bacteria were discovered. Eight of the placentas gave positive results, as well as seven of the umbilical cords examined. The control experiments, two in number, made with the object to determine whether or not the bacteria were of accidental occurrence, gave negative evidence. It is true that putrefactive bacteria do occur in animals after the lapse of a certain time after death, and this I observed in the blood from the heart of the animal which

was examined eighteen hours after death. But even here the fœtuses were free of them. Moreover, it can be seen from my experiments that the examinations were made immediately after death or within a few hours, and that only bacteria pertaining to septicæmia (micrococci) were seen, and not the organisms of putrefaction, which are dumb-bell-shaped and rod-like.

The few negative results are certainly of little significance in contrast with the many positive observations, especially in view of the difficulty in making the examinations. In many instances, especially in the case of the ultramarine liquid, I at first had regarded the results of some experiments as negative when, after a prolonged search, they proved otherwise, a new portion of the same tissue yielding at once the blue granules.

The observation in the human being which I had the exceptional opportunity of making I regard of still greater importance than all the experiments combined. As described above, I have observed that the bacteridian disease of the mother is transmitted to the fœtus. The examination of the fœtus in this instance, which was removed by Cæsarean section, was made one hour after the death of the mother. In this case also the bacteria in the blood and tissues of the fœtus could surely not be accidental.

I do not stand alone in bringing forward proof of the proposition that solid particles may pass from mother to fœtus. Perls (*Lehrbuch der Allgemeinen Pathologie*, II. Theil, 1879), Caspary (*Vierteljahrsschrift für Dermatologie und Syphilis*), Reitz (*Sitzungsber. d. Akad. d. Wiss. Wien*, 1868, lvii.), all quote personal experiments and observations of others which prove that solid particles can pass from mother to fœtus. The observation of Prof. Friedrich of cancer metastasis from mother to fœtus in utero is also extremely interesting and suggestive in connection with this question.

There are on record some few observations which are opposed to the facts brought forward. Most of them, however, are mere statements. The only instance worthy of mention is that of Prof. Greenfield (*Lancet*, December 18, 1880), who denies that the bacteridian disease is transmitted to the fœtus, stating that the blood and tissues of the fœtus of an animal dying of anthrax were found not to contain bacilli, whilst those of the mother swarmed with them. Speaking in general, the experiments of my predecessors on this subject are far from conclusive, being limited to but few trials, and showing little evidence of accuracy.

I think that Cohnheim's theory of the emigration of the white blood-corpuscle, which has been proved lately by himself to be a mere passive process of filtration through the blood-vessel walls, is a fair analogy to what we may find in the transition of solid particles through the attenuated utero-placental walls.

WILMINGTON, DELAWARE, March 10, 1884.

SUBINVOLUTION OF THE UTERUS AND INFLAMMATION OF VULVO-VAGINAL GLANDS CAUSED BY PORTION OF RETAINED PLACENTA.

Read before the J. Aitken Meigs Medical Association

BY C. C. DAVIDSON, M.D.

DURING the early part of December, 1882, Mrs. H. S., aged 34 years, called on me for the treatment of what she supposed to be gonorrhœa contracted from her husband.

On examination, the vulvo-vaginal glands of each side were in a high state of inflammation; suppuration had already taken place, and, on pressure, a thin yellow fluid oozed out. The vagina was hot and congested, and painful to the touch. The uterus was enlarged, the sound entering fully four inches. The os gaped, and from it issued a thick yellowish discharge tinged with blood. The lymphatic glands in each groin were enlarged, especially on the left side, and painful on pressure. She suffered from constant pain in the lower part of the back; complained of a dragging sensation in the stomach,—the pain in the back extending along the lower extremities. Headache was constant. Her general health was not good; the appetite was poor; she passed urine frequently, the act being always accompanied with pain. The patient was very anæmic, this condition being probably caused by the almost constant dribbling of blood from the uterus.

The following is the history, as obtained from the patient. Her menstruation began at eighteen years, and she was regular up to date of her marriage. She soon

became pregnant, and was delivered of a female child after an easy confinement, this occurring in 1878. In the month of May, 1880, she again became pregnant; a few months later she produced an abortion upon herself by means of a quill. A few days after, while lying upon her back on the floor, her child accidentally fell across her stomach with some force and causing some pain. Within twenty-four hours a pinkish vaginal discharge appeared, and a day or two later the abortion took place. While under medical treatment, she received a sudden fright, which caused her to jump from her bed and run down-stairs. This was followed by a severe hemorrhage, controlled, however, by the attending physician. When she was able to be about, she noticed a constant dribbling of blood from the vagina, and her menstrual discharge amounted to flooding, lasting ten days. At this time she placed herself under the care of a female physician, who treated her for several months without any benefit.

When the patient came under my care, after forming my opinion of the condition of things, I first treated the supposed specific discharge and poulticed the inflamed vulvo-vaginal glands, ordering as a vaginal injection alum and zinc; and I gave her also a mixture containing iron, quinine, and strychnia as a tonic. This plan of treatment was soon followed by an amelioration of the inflammatory condition, and in the space of a week the discharge ceased. I will here state that I used for the irritation of the bladder twenty drops of fluid extract of kava kava, given by the mouth, three times daily, with marked success.

While my treatment for the inflammatory condition was a success, the treatment to arrest the constant dribbling of blood was to a certain extent a failure. She had taken ol. erigeron. Canadensis, ergot, chloride of ammonium, etc., which held the bleeding in check, but never completely arrested it.

Having come to the conclusion that the hemorrhage came from some intra-uterine growth or the remains of the placenta from the abortion, Dr. E. P. Bernardy was called in consultation on January 31, 1883.

After making a thorough examination, it was decided that the hemorrhage arose from a diseased condition of the endometrium, with likelihood of presence of remnants of placental tissue. Prior to our coming the next day, the patient was instructed to wash out the vagina with a solution of potassium chlorate (3ii to aqua Oss). A large sponge tent was then introduced, and left in position for twenty-four hours.

The sponge tent being taken out, February 1, 1883, the os was found perfectly dilated. It was hooked with a double tenaculum and the uterus pulled down. On introducing the finger, the lining of the cavity was found roughened, and in the upper left corner of the uterus an elevation. On scratching with the fingernail, a piece was torn off, which on examination was found to be placental tissue. The uterus was well curetted and thoroughly cleansed of all adventitious material, about a tablespoonful of which came away. After the curetting was completed, the cavity of the uterus was thoroughly swabbed out, several times in succession, with Churchill's tincture of iodine; all signs of hemorrhage ceased, and the uterus contracted nicely. The vagina was washed out with hot water, the patient placed in bed, and a suppository, containing opium and belladonna, was given by the rectum, to be repeated every four hours; three grains of quinine were taken internally every three hours. The patient was requested to lie in bed and keep perfectly quiet for a week. There was no bloody discharge, and at the end of ten days the patient called at my office. Examination with the sound found the uterus reduced to three inches. I made an application internally of equal parts of tinct. iodine and glycerin, and at the same time I enjoined the patient to go home and remain quiet; instead of which, she went out shopping, walking about thirty blocks, the same evening attended the theatre, and wound up with a late supper.

Next morning I was sent for. Found the patient suffering excruciating pain in the lower part of the abdomen, pulse 120, temperature 102° F., and slightly delirious. Diagnosticated pelvic cellulitis, and applied hot poultices to the abdomen; administered internally one grain of powdered opium every two hours, and a fever-mixture containing one drop of tinct. aconiti radicis with each dose. My next visit found the patient easier. This treatment was continued for several days, the patient

gradually improving. In the left inguinal region I could then feel a hardened mass.

Dr. Bernardy was again called in, and, on making a vaginal examination, a large indurated mass, partly surrounding the uterus and pushing it down, was found on the left side of the pelvic cavity. By making combined external and internal palpation, the mass was easily outlined. My diagnosis was confirmed, and it was decided to apply a blister externally, with opium-and-belladonna suppositories to allay pain, hot-water vaginal injections, and internally a mixture containing hydrarg. chlor. corros., potassium iodide, and ammonium chloride.

The mass was of such a size that it pressed upon the sacral plexus of nerves, producing the most agonizing pain running down the leg, the pain being somewhat relieved by applying veratria ointment along the nerve and keeping the limb well wrapped in cotton-wool. Under treatment the mass was slowly absorbed, and the patient gradually regained her health.

From a study of this case we learn that palliative treatment for hemorrhage was of no avail. It has taught me two things:

First. In all cases of obstinate hemorrhage from the non-pregnant uterus, to dilate the uterus and examine the cavity, —that is, if the hemorrhage be not caused by a cancer of the neck or a vaginal polypus.

Secondly. In making any internal application to the cavity of the uterus, the patient ought to be told of the risk she assumes if the physician's orders are not implicitly carried out. I am satisfied that the above attack of cellulitis was brought on by the patient's indiscretion.

P.S.—Since reporting the above case, the patient called on me, and her improvement has been so marked that I did not recognize her at once. She has increased in weight, and states that she has never enjoyed better health.

PHILADELPHIA, 200 SOUTH TWELFTH STREET.

A BOSTON CREMATION SOCIETY.—The New England Cremation Society has been organized in Boston. The fee for membership is one dollar and a half per month, or twelve dollars annually, which confers the right to the member to have his body cremated without further expense. A building in accordance with the latest designs and improvements will be constructed.—*Popular Science News.*

A CASE OF JAUNDICE DUE TO A FIBROUS GROWTH OBSTRUCTING THE BOWEL AND CAUSING FATAL PERITONITIS.

BY JAMES H. WROTH, M.D.,

University of Pennsylvania.

IN the spring of 1883 I first met Mr. A. C., and up to October 1 he was, to all appearances, in good health. About October 1 he left for Colorado, returning to this place in the early part of January, 1884, and upon his arrival placed himself under my charge.

My note-book reads as follows;

January 17, A. C., 39, white, single, born in England.

Previous History.—Good. Has enjoyed good health prior to this attack. Has lived in Australia, California, and England. No hereditary predisposition. Has never had an attack of serious illness.

Uses stimulants moderately, chiefly at meals. Smokes moderately.

In October, while in Colorado, had an attack of "biliousness," which came on suddenly, followed by jaundice. Does not know what remedies the physician employed. Complains of general malaise, inability to sleep or lie upon the right side, and has fever every afternoon, lasting until 6 P.M. Skin burning and itching; no headache; tongue coated,—white, moist, with gray centre; appetite ravenous; bowels moved daily; passages "white, but loose;" urine high-colored; unable to retain it all night; rises two and three times to empty bladder. Pulse 80; temperature normal.

Examination shows body slightly emaciated. Present weight, one hundred and fifty-four (normal, one hundred and ninety-six). Chest and heart normal; stomach and intestines slightly tympanitic, chiefly over descending colon; liver enlarged, lower edge extending one and a half inches below ribs and in median line, half-way between umbilicus and sternum; spleen apparently normal; palpation causes slight tenderness in vicinity of gall-bladder,—patient says not severe enough to be pain; entire body jaundiced deeply. Examination of urine shows biliary acids. Ordered hydrarg. chlor. mite gr. iv at once; ammonii chloridum gr. xv after meals, and Apollinaris water f℥iv before breakfast daily.

19th.—Appearance unchanged. Bowels not moved since 17th; sleeps better, but complains of the itching of skin; fever not as high as formerly; can retain urine better. Medicines continued; enema at night.

February 1.—Bowels moved daily since last report, and darker in color; retains urine all night; urine lighter in color; fever has disappeared; complains of an obscure pain in bowels during past three days, which he can-

not definitely locate; palpation reveals no markedly tender spot. Ordered potassium iodide gr. xi three times a day,—before breakfast, and after other meals.

3d.—Jaundice seems better; conjunctiva clearer; bowels same as before; no tenderness of abdomen; liver still enlarged; says he is "all right, but weak." Ordered ung. hydr. iod. rub. (gr. iii to ʒi) applied at night over liver; also iodide potash to be doubled every week until fʒiij are taken, three times a day,—equal to 33 grammes daily.

11th.—Patient says he is well. Jaundice is largely gone; other symptoms—itching, fever, difficulty with urine, insomnia—better. Medicine continued, and tepid baths ordered.

19th.—Called to see him at daybreak. Found him suffering intense pain in region of stomach; relieved by morphia hypodermically. Says he ate some cheese the evening previous, and attributes attack to that. Pulse 90; temperature normal.

During the day pain subsided. Says he had a good operation last night.

20th, A.M.—Pain returned in force and violence, resembling that of passage of gall-stones; morphia by mouth and hypodermically; hot-water applications to abdomen. Tenderness over stomach and liver. Pulse 96; temperature above normal.

P.M.—Pain still marked when morphia wears out; bowels becoming tympanitic and tender, vomiting contents of stomach; urine passed freely, high-colored; fever setting in; mind clear. Morphia hypodermics continued; chloral by mouth and applications continued.

21st, AM.—Signs of peritonitis; pulse small, rapid, compressible; general pain, vomiting.

Consultation.—Diagnosis of obstruction. Full doses of morphia hypodermically, linseed-meal poultices, beef-tea, and injections of warm water.

22d.—No change. Vomiting increased, rejecting a liquid resembling bile; no fæcal odor; large injections of turpentine emulsion, with no result; hot turpentine cloths to abdomen; nutrient enema; whiskey per mouth and rectum; morphia continued. At noon pain ceased; other symptoms continued, pulse ran up rapidly, temperature increased. Patient died during night, from exhaustion. Mind clear to time of death.

Post-Mortem.—Lungs and heart healthy.

Abdomen.—General peritonitis; all organs bound together by lymph; local points of inflammation in various parts of small intestine; inflammation of colon at sigmoid flexure; rectum healthy; liver enlarged; hepatic substance healthy; gall-bladder enlarged, filled with bile; no gall-stones in the gall-bladder or intestines; spleen slightly enlarged, friable; stomach congested at middle of lower curvature; mucous membrane denuded for a space of three inches by four; pancreas disorganized, breaking down upon handling.

Surrounding the pylorus, and extending along the duodenum for some distance, including the ductus communis and pancreatic duct, was a fibrous tumor about an inch and a half thick. In it was included part of the hepatic ducts and cystic duct.

Below this tumor, for a distance of ten or twelve inches, the intestine was almost gangrenous, but not contracted. That part of the intestine included in the tumor was contracted; it would admit a lead-pencil. This contraction existed in the ducts.

The case, during life, was regarded as jaundice with an undetermined cause, and the treatment was entirely empirical. The fatal attack was considered one of obstruction of bowel, situated high up, and, until the post-mortem revealed it, no suspicion was entertained of the existence of a tumor.

This being sufficient to explain the hepatic trouble and the fatal attack, the question arises, why did it not manifest any signs of its presence during life?

The principal features of the case were—

1. The previous good health of the patient, and the sudden development of jaundice.

2. The inability to discover any obstruction, and the absence of gastric symptoms.

3. The gradual disappearance of the jaundice.

4. The sudden and rapid course of the fatal attack, with obstructive signs.

Granting that errors might have been made in examination, it might reasonably be expected that a pyloric tumor would produce a train of gastric symptoms sufficiently marked to produce a clue.

From the size of the tumor, it must have been some time developing; the hepatic trouble had existed about four months, and the course of the fibres in the tumor embraced the pylorus and bile-ducts like a ring, yet no apparent trouble about the pyloric orifice could be detected.

At no time did the patient complain of pain in that region, or present any of the constitutional signs of cancer. The tumor, as before stated, was fibrous, resisting the knife, of a yellow-white color, and apparently homogeneous.

The case was, and still is, a puzzle to me, and I mention it in the hope that some one more skilled in diagnostic lore may explain. The facts are as above stated; the explanation of them is another and a more difficult task.

ALBUQUERQUE, NEW MEXICO, March 23, 1884.

NOTES OF HOSPITAL PRACTICE.

UNIVERSITY HOSPITAL.

SERVICE OF WILLIAM GOODELL, M.D., PROFESSOR OF GYNÆCOLOGY.

Reported by WILLIAM H. MORRISON, M.D.

COCCYGODYNIA.

GENTLEMEN,—The bad weather of this morning has kept our patients from arriving promptly, and I shall therefore occupy the early part of the hour with a few remarks on coccygodynia. This affection has another name,—coccyodynia,—and means pain in the coccyx. You will see a good many cases of this affection, and it is well to be posted in regard to it.

What are the symptoms of coccygodynia? They are pain in defecation, and pain in sitting down or rising up. In sitting down, women suffering from this disease will take hold of the back of the chair and sit down on one buttock, so as to avoid placing any weight on the coccyx. In rising up they do not rise directly, for in so doing a strain is thrown on the coccyx; but they catch the back of the chair with their hands, and lift themselves. I know of but one other disease that will produce this symptom, and that is rare. It is the formation of a little abscess in the coccygeal region, in which, after opening, will be found a small coil of hair. This sometimes gives a great deal of annoyance. There is another disease in which this symptom is simulated to a certain extent,—that is, fissure of the anus.

Another of the symptoms I have mentioned — *i.e.*, pain in defecation — may also be caused by fissure of the anus, or by an inflamed pile; but the patient will be likely to recognize a pile. In the majority of these cases it will be found that the nervous system is below par, or that there is nerve-prostration. In other cases the patients are healthy. To-day I wish especially to point out the differences between the real Simon-pure disease and the mimicry of the disease; and the latter is far more common than the former.

The cause of the real disease is some injury to the coccyx. This is a movable bone, and increases the anterior-posterior diameter of the inferior strait from four inches to four and a half inches. This bone may be anchylosed, or its ligaments shortened; and this, by the way, is one objection to a woman in advanced life giving birth to a child. Under these circumstances, the coccyx may not be able to bear the strain put upon it, and there may be overstretching of the ligaments, or, in the case of anchylosis, a positive fracture of the bone. I have heard the coccyx snap more than once. Two of these instances were forceps cases. Another cause of injury to the coccyx is the bucking of a horse, in which the horse brings its four feet together and gives a jump, throwing its rider into the air, and in coming down the coccyx is often injured. I have seen several instances of this. I have seen a very bad example of this trouble in a lady otherwise in excellent health, produced by her chair being withdrawn as she was about sitting down, causing her to fall to the floor, striking the coccyx. The bone was fractured, and, as she would not consent to the radical operation, I was unable to give her any relief. Pure coccygodynia may be the result of dislocation, fracture, or of neuralgia.

The treatment of injuries to the coccyx occurring during labor should consist in keeping the patient at rest, the use of sufficient opium to relieve the pain,—and usually this is not great, there being only a sense of soreness,—and keeping the bowels bound for a week. In the two cases to which I have referred, union took place. In one of these I think that there was a fracture of the bone; in the other, the ligaments probably gave way. I have seen other cases in which the bone was not injured, but in which the ligaments were broken, causing the bone to be very movable, and occasioning the woman a great deal of discomfort.

When you get hold of a case of real Simon-pure coccygodynia, the treatment should, in the first place, be directed to lulling the pain in the nerves, for sometimes the nerves have been injured. An excellent remedy is five grains of iodoform by suppository at night. It is important to avoid the use of morphia as much as possible, for such patients are very liable to become morphia-eaters. When it can be done, it is better to give the remedy by the bowel. In fracture, it is better to give it by the mouth. Just here let me call attention to a mistake which is very commonly made. There is a wide-spread idea that the Latin noun *os*, a "mouth," is of the masculine gender, and you will frequently see written "*per orem*" for "by

the mouth." *Os* is, in reality, a neuter noun of the third declension, and its accusative case is like the nominative, so that "by the mouth" should be written "*per os*," not "*per orem*." In fracture, then, you give the medicine *per os*, and keep the patient as quiet as possible, and sometimes you will be rewarded with a cure. The pain may sometimes be lulled by the use of injections of minute doses of carbolic acid around the coccyx.

If the worst comes, and it is impossible to relieve the pain by the measures mentioned, it will be necessary to extirpate the coccyx. I have done the operation but twice. I have, however, seen a number of cases in which it ought to have been done, but the patients would not consent. In your text-books you will find the following procedure recommended: introduce a tenotomy-knife under the skin, and pass it around the coccyx, severing all its attachments, thus giving rest to the bone and allowing an opportunity for repair. This operation is not an easy one to perform, and, as the results are disappointing, I should therefore advise you not to perform it.

The proper plan of treatment is extirpation of the coccyx. In performing this operation, an incision is made over the bone, passing down to its surface. All the muscular attachments are then severed, and, with the knife, the offending portion is disarticulated. If there has been a fracture of the bone, the portion left behind should be examined, and any roughness or irregularity removed. The woman on whom I operated two months ago suffered terribly from the pain. She also had an abscess, which, I am disposed to think, came from the irritation of the broken bone. I found an ununited fracture, and extirpated the broken portion of the bone. She was at once relieved of all her trouble. The other case was caused by a difficult labor, and had become bedridden from her sufferings. She was also cured. I think that after this operation it would be wise to insert a drainage-tube, so that if there is any discharge from the bone it will find a convenient way of escape.

Then there is the mimicry of the real disease; and this is much more common than real coccygodynia. This occurs in nervous, hysterical women. It appears in girls who are overworked at school, and in unmarried or married women who have much care or trouble. It may arise from a positive injury. In hysterical cases, to use a homely expression, the nerves are "spiling" for an excuse to make trouble. A girl goes skating, falls on her knee, and may be laid up for years with an hysterical knee. In the same way, there may be an hysterical coccyx from a fall. The pains of the mimicry of the disease are very analogous to those of the real disease. They are not quite so severe; still, they are sufficiently marked to cause a great deal of suffering. It is not always easy to make the diagnosis between the real and the simulated. One who is accustomed to see these cases can almost make the diagnosis from the expression of the face. The woman who has the Simonpure disease will have the evidences of suffering in her face, whereas the woman with the mimicry of the disease may tell you of the agonies she suffers with a smile on her countenance, or with what I call the hysterical mask. This is one of my ways of diagnosticating these cases; but I was once very badly caught. I had under my care a very bright lady, an excellent metaphysician, and much interested in such studies. I mention this point as it has a bearing on the origin of the trouble. While riding a horse, it bucked, and ever afterwards she had pain in the coccyx. I was completely deluded. I concluded that here we had a sufficient cause, and that this was a case of the real disease. I examined her, and found a retroverted womb and prolapse of both ovaries. With a pessary, I was able to restore the womb and the ovaries to their proper position, and this effected considerable improvement in the pain in the coccyx. The pain, however, still continuing, I decided to extirpate the coccyx. The day and hour for the operation were appointed, and all the preparations were made, when suddenly, as if by magic, the pain disappeared. She had been in a receptive condition, the nerves were "spiling" for an excuse to make mischief, and the injury offered them the excuse. I speak in this way, because I cannot define these nervous fluids. We do not understand their action, and perhaps never shall.

When these cases come to you, do not be too anxious to cut away the coccyx. There is no objection to threatening it occasionally. Try all the general measures, and use local placebos for their impression on the mind, and also for their

positive local effect. Take it all in all, I like iodoform better than anything else. It should be administered by suppository, in doses of from three to five grains. Another excellent remedy is belladonna by suppository. Opium should be avoided. The general health should be improved. Put the patient to bed, have her rubbed, keep her friends from coming to see her, feed her as much as possible, giving large quantities of milk, using malt and iron, and, little by little, you will get the upper hand of the trouble. It is always well to begin the treatment with decided doses of bromide of potassium, which may at once cure the coccygodynia. If the pain is decidedly relieved by large doses of bromide, I feel very confident that it is of nervous origin. It is, I think, safer, at first, to look upon the affection as of nervous origin, rather than traumatic.

There is one point to which I neglected to refer, and that is, the way to detect an injury of the coccyx. The index-finger should be passed into the rectum, and the thumb over the coccyx. You must be careful not to be misled by the statements of the patient, for the mere insertion of the finger is a shock, and the woman at once complains before you have pressed the parts. Before manipulating the parts, ask if it gives pain; then pretend to move the bone, and see if any complaint is made, after which, get directly over the bone. In real coccygodynia, the slightest touch will give very great pain. This is almost as sensitive as a caruncle of the meatus urinarius.

One word in regard to preparations of iron. There are certain preparations which I think better for nerve-cases than others. Almost all nervous stomachs will bear the reduced iron, or iron by hydrogen. I often combine it with arsenic. In regard to strychnia, my experience is that in many of these nervous cases it cannot be given with profit in the early part of the treatment. The nerves are then too ready to resent anything which makes any impression on them. One-sixtieth of a grain will, under such circumstances, sometimes set the jaws. The muriated tincture of iron is an excellent preparation when it can be disguised. If the patient has a good set of teeth, I should not give it. It is liable not only to discolor, but also to do positive injury to, the teeth. It is, therefore, better, as a rule, to avoid the use of the tincture of the chloride of iron. Blaud's pill, which consists of the dried sulphate of iron with bicarbonate of potassium, is often an excellent preparation. With reference to dialysed iron, I have met with some cases in which it did good, but in the majority it was of no benefit. I am disposed to attribute this to changes which occur in the preparation, and I have almost entirely given up its use.

In treating these cases of the simulated disease, the patients, as I have already said, must be well nourished. They should receive malt and large quantities of milk. They will grow fat, and, as they do so, the nerves will become more tractable. This is like other nerve-pains which women often complain of, and which may appear in the head, in the back, or even in the toes. I have seen a severe case in which it was located in the instep. All pains of this character are to be treated in much the same way.

NERVOUS AFFECTION OF THE BLADDER.

This is a patient whom I have not yet seen. She states that she has a pain in the womb and in the right side, going down to the knees. Let me think out loud. There is a pain in the right side, going down to the knees. What are the nerves? I know that there is one nerve which will do this, and that is the genito-crural nerve. There is probably something the matter with the right ovary, causing pressure and congestion.

Let us obtain the remainder of the history. She is a colored woman, 45 years of age, married, and has had seven children, the youngest of whom is five years of age. For the past four months she has lost very little at the menstrual periods. She has considerable yellow leucorrhœa. She has some difficulty in making water. She is unable to urinate in the morning, but has to wait until near noon, when she will make a "pretty smart" quantity. The water is slow in coming: she has to wait some time before it begins to pass. She does not have to get up at night to urinate. This difficulty might suggest the presence of a stone; but, if there were a calculus, why should she not be able to pass her water? A stone causes a constant desire to urinate, with the passage of only a small quantity of urine. This looks more like a nerve-symptom.

I shall now make a vaginal examination.

The first thing I find is a tear of the perineum almost down to the anus. I also find that a pessary has been used. The womb is in pretty good position. On its posterior surface I detect little roughnesses, which leads me to believe that there is the development of multiple fibroid tumors. There is a little tenderness over the left ovary, but I am unable to feel it. I cannot feel the right ovary, and neither is it so tender as the left one. The womb has probably been retroverted, and there has been a slight laceration of the cervix. There is not sufficient uterine trouble to explain the symptoms.

Let us next examine the perineum. The urethra bulges outward, and that is one reason probably why she has difficulty in making water. The urethra makes a sharp curve, interfering with the passage of urine, just as bending a rubber pipe will prevent the flow of water. In cases of this kind it is well to examine the bladder for stone. I make it a rule, in almost every case in which there are symptoms which suggest the possibility of stone in the bladder, to examine for vesical calculus, for in one case I was badly taken in by neglecting this point. The uterine sound is a pretty good instrument for this purpose, but not so good as the regular bladder-sound. I lift up the floor of the bladder with a finger in the vagina. As a woman has no prostate gland, it is easier to discover a stone in the female than it is in the male. I can find no stone. Stone in the bladder is much more rare in the female than it is in the male, and this is due to a variety of reasons. In the first place, the female urethra is very short and dilatable, so that if a stone forms in the kidney and is carried into the bladder it is usually expelled as soon as it arrives. In the next place, women are not exposed to the various vicissitudes of weather, as are men. In the third place, women, as a rule, do not lead such dissipated lives as men. Men frequently become intoxicated, and this is a predisposing cause for stone. Further, in limestone districts, it is the men working out in the sun who drink the larger quantity of water; and this may have some influence in determining the formation of stone.

You may live many years without coming across a stone in the female bladder, and then one may occur which, to your mortification, you may overlook. This is probably a nervous bladder. It may have had its origin in a retroverted womb, the cervix pressing on the urethra and bladder, producing an impression which is kept up by the nerves. If any of you have ever been nervous, you know that you could not hold your water; and I am sure that a number of you will suffer in that way as the time for examination approaches. This nervousness does not usually affect the bowels. I knew a clergyman who had invariably to go to the water-closet before entering the pulpit to preach. I have known medical and other lecturers who had always to empty the bladder before entering the lecture-room. In regard to myself, it was a long time before I obtained control in that respect. As I have said, I am disposed to look on this as a nervous bladder.

I shall order the following mixture, which ought to have a good effect if our conclusion is correct:

℞ Ammonii chloridi, ʒii;
Ammonii bromidi, ʒiv;
Infus. gentian. comp., fʒvi.—M.
Sig.—A tablespoonful three times a day.

She will take this before meals, if it does not irritate the stomach. If she cannot take it before meals, she may take it afterwards. If a tablespoonful makes her sleepy, the dose will be reduced to a dessertspoonful. The bowels are regular. If there had been constipation, I should have added one grain of the resin of podophyllum to this mixture.

In cases of this kind we often have a real catarrh of the bladder, and then I usually order bicarbonate of sodium in large doses with belladonna. I should give twenty grains of bicarbonate of sodium three times a day. This may be administered in infusion of buchu or some other diuretic. The belladonna had better be given in a separate prescription, for with this drug you have to feel your way. Some patients can take the tincture in twenty-drop doses, while others cannot take five-drop doses. I have seen one-eighth of a grain of the extract so upset a lady that she was spitting cotton, seeing a variety of imps, and talking unmitigated nonsense. I have seen half a grain in two doses not only demoralize but unchristianize a very excellent clergyman. He talked such outrageous nonsense that, if he had been in his right mind, he would not have been allowed to remain in the

church. A dose of morphia and a little brandy restored him to his senses. In the other case a little brandy was all that was required. There are some remedies which I never prescribe in their officinal doses at first: tincture of cannabis indica is one, aconite is another, and a third is belladonna. I always begin with a small dose, and work upward as I find the patient stands it.

We shall have the patient report in one week, and we shall then be able to see what the effect of the treatment has been.

TRANSLATIONS.

ASPHYXIA FROM ANÆSTHETICS, AND ITS TREATMENT.—Dr. Benjamin Howard, of New York, has recently given several demonstrations in Paris and London of his method of treating asphyxia. He claims that the traction of the tongue, so universally employed, is not sufficient to produce an elevation of the epiglottis; for the anatomical conditions, under these circumstances, are opposed to the elevation of the epiglottis by this means. The only way in which elevation of the epiglottis is possible—and this is the principal feature of Dr. Howard's communication—is to *place the head and the neck in a condition of forced extension.* The result of this position is to remove the tongue from the pharynx, to augment the calibre of this tube, and to establish a free, commodious, and unobstructed way from the nose to the lungs. At the conclusion of the remarks made by invitation upon this subject at a hospital clinic, in Paris, M. Verneuil made some judicious observations upon the demonstration, recognizing the correctness of the facts claimed, and insisting upon the interest of the applications flowing from them.—*Le Progrès Médical.*

CYSTICERCUS IN THE BRAIN.—In the service of Charcot, at Salpêtrière, a soldier, 24 years of age, was admitted into the ward with headache of three weeks' duration. His illness began shortly after his return from Tunis a year before. He was subject to attacks of headache, vertigo, and vomiting. He had had one epileptiform convulsion. There was no paralysis; but he had vertiginous sensations, which made him stagger in walking. He was slightly deaf, had tinnitus and choked disk. Temperature normal. Vomiting and headache persisted, delirium appeared, and he finally died with double pneumonia. At the autopsy a cysticercus was found in the fourth ventricle, and two others at the base of the brain. The former had caused an excess of fluid in the ventricles (hydrocephalus), and choked disk; the others had produced congestion of the membranes. No other evidences of the parasite were found in the body.—*Archives de Neurologie*, March.

A MODIFICATION OF THE METHOD FOR TOTAL EXTIRPATION OF THE UTERUS.—Prof. Müller, of Berne, has modified the method for the total extirpation of the uterus, in the following manner. During the operation the abdominal aorta is compressed, and the uterus turned out through an incision in the posterior wall of the vagina. After securing the broad ligaments and vaginal tissues with provisional ligatures, the uterus is then divided vertically with knife and scissors into a right and a left half, each of which is drawn down and the ligaments secured just as in the treatment of pedicle of uterine polypi, the uterine tissues divided about one centimetre from the ligature. The wound in Douglas's pouch is not closed, nor is drainage employed, the only dressings being dry carbolized gauze and daily washing with corrosive sublimate.

In the four cases in which the author employed this procedure the result was perfectly satisfactory, probably from the very slight loss of blood which this method entails. — *Deutsche Med. Zeitung*, May 12, 1884. S.

A DANGEROUS ADULTERATION OF IODOFORM. — Dr. Biel, of St. Petersburg, calls attention to a commercial adulteration of iodoform with picric acid, which cannot be detected by the tests of the Pharmacopœia. This mixture is not only poisonous, but is explosive when rubbed up in a mortar. It can be detected by the citron-yellow color it yields to a watery filtrate. If a solution of cyanide of potassium be added to the filtrate, no reaction will follow if iodoform be pure; but if there be a trace of picric acid present, the solution will in the course of ten minutes become brownish red (isopurpuric acid), and in a short time deposits an insoluble precipitate of isopurpurate of potassium. —*Deutsch.-Amerikan. Apotheker Zeitung*, p. 238.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, JULY 12, 1884.

EDITORIAL.

MEDICO-LEGAL NOTES.

A QUESTION of some interest to physicians comes up in the treatment of paupers, as to the source from which they are to receive pay for their services.

In a recent case in this State, a person was injured by an accident, and, being without means of support, he was shortly afterwards taken to the poor-house. A physician treated him before his removal to the poor-house, and subsequently, with the knowledge, but apparently without the direct request, of the county authorities. A bill was rendered to the county for the services, and payment was refused; whereupon a suit in a justice's court was entered, and a judgment was obtained. This judgment was, however, reversed on appeal, on the ground that a justice's court had no jurisdiction: the action should have been brought in a court of quarter sessions. The point as to the right to compensation from the county was not directly considered in the appeal, but no intimation was given that the first verdict was improper. The physician had chosen the wrong court to sue in, and a verdict rendered in such an action could not stand.

The courts are beginning to have a good deal of trouble over the oleomargarine manufacture, and the Legislatures are making the laws more and more strict. In Ohio the statute forbids the sale of any substance purporting to be butter or cheese, or having the semblance of butter or cheese, which substance is not made wholly from pure cream or pure milk, unless each package of such substance have distinctly and durably painted, stamped, or marked thereon the name of each article used or entering into the composition of such substance.

A citizen of Ohio obtained a patent from the United States on some device for manufacturing a substitute for butter. In carrying out his patent he failed to mark, as every manufacturer of oleomargarine does, the ingredients going to make up his concoction. He was thereupon arrested and fined in a police court of Cleveland, and this action has recently been affirmed by the higher court. The interesting point was made on his behalf that, his device being patented, and protected by the United States, the Ohio authorities could not interfere and prevent his getting the full advantage of his patent. The court, however, held that while the State could not discriminate against his patent by allowing the sale of similar unpatented articles, yet it could, under the general police powers of the State, prevent the sale of all articles which were considered injurious and unhealthful.

One of the English courts of appeal has recently decided that a statute giving a board of health power to make by-laws to prevent the keeping of animals on premises where they will be injurious to health does not authorize such board to enact a by-law that pigs shall not be kept within fifty feet of a dwelling-house.

That prolific breeder of disease, sewer-gas, seems to be one of the hardest things to discover in a house by a superficial examination, and the cases are increasing where a tenant tries to escape payment of rent because of this defect. The law, however, sides with the landlord to the extent that he is under no obligation in the matter except where he makes representations that are false. If the landlord should say that the house was in good order, and there was sewer-gas in the house, the tenant must nevertheless pay rent if he examines the house. A recent case in a New York court establishes the rule, however, that if the tenant says he does not

care to examine the house, but will rely upon the landlord's statement that it is in good order, and sewer-gas is subsequently discovered, the house can be abandoned and rent cannot be collected.

THE INTERNATIONAL MEDICAL CONGRESS.

FROM the official rules and programme which have just been published by the Organizing Committee, it appears that the proceedings of the eighth session of the International Medical Congress, which convenes at Copenhagen, August 10, will be sufficiently varied and unusually valuable. The Congress will be divided into fourteen sections for the scientific work (meeting daily from 10 A.M. to 12, and from 1 to 3 P.M.), and will also meet in general session (from 4 to 5.30 P.M.). There will also be evening assemblies for social purposes and the delivery of some special addresses from 8.30 to 9.30 P.M.

The ordinary members of the Congress are simply required to be medical men legally qualified to practise in their respective countries, who shall subscribe their names upon the register of the Congress and take out their tickets of admission. Other scientific men interested in the work of the Congress can be inscribed as extraordinary members. The subscription has been fixed at twenty Danish crowns (or about twenty-two shillings threepence), and each member of the Congress will be entitled to a copy of the Transactions when published. The books will be open for registration on the 9th of August all day (from 9 A.M. to 5 P.M.), and for one hour on each of the succeeding mornings during the week of the session. In order to save trouble, it has been arranged that inscription can be obtained beforehand by remitting the subscription to the Secretary-General, Prof. C. Lange, together with the full name, title, and address of the applicant.

It is advised that arrangements for lodgings should be made in advance, as those who come late may find difficulty in finding them; the Reception Committee has named the 20th of July as the latest time to apply through the Secretary-General for assistance in obtaining accommodations.

In the very liberal programme which has been issued, in which there is promised a wealth of material, we notice the name of only one Philadelphian, Prof. J. Solis Cohen, who will read a prepared communication on the "Prognostic Significance of the Several Local Manifestations observed in Tuberculosis of the Larynx." Should the next Congress be held in this country, we predict that this city will be more largely—though perhaps not better—represented in the proceedings.

CRESSON SPRINGS AS A HEALTH-RESORT.

WE are in receipt of a letter announcing that Dr. Carl Seiler, of this city, is going to spend the present summer at Cresson, Pennsylvania, with a view to investigate further the therapeutic value of the mineral springs of the place in the treatment of catarrhal diseases of the mucous membranes. The results of his experiments with these waters which he carried on during the winter were given in a condensed form in a paper which he read before the American Medical Association at Washington, and he now intends to continue these investigations under the more favorable influences of the pure and invigorating mountain-air. The situation of the springs, at the summit of the Alleghany Mountains, at a height of two thousand three hundred feet above the level of the sea, and the moderately cool and dry climate, will, of course, greatly benefit patients, even if not using the medicinal waters; while the two combined cannot fail to become a powerful factor in the treatment of even those severe cases which

under other conditions would be intractable.

His views in regard to the proper management of patients at watering-places, as expressed in the paper above referred to, are certainly sound. We can heartily endorse his opinion that our American mineral springs are fully equal to some of the celebrated European spas, but that we cannot, in this country, expect to obtain the often marvellous results that are reported from the use of the celebrated German or French waters, so long as patients are allowed to use medicinal waters at their own discretion—or, rather, indiscretion—and to pay no attention to proper diet and exercise. We hope he will succeed in carrying out his intentions, and that, as the result of his studies, the reputation of Cresson Springs as a Pennsylvania health-resort may be increased, and its great natural advantages become more widely known.

NOTES FROM SPECIAL CORRESPONDENTS.

LONDON.

THE desire to succeed in life is regarded as at once natural and laudable. Probably when the pirate boats of our Norse ancestors showed themselves over the angry waves,—the white horses,—to the consternation of the British, their stay-at-home relatives admired their courage and determined to rival their exploits when they heard of them. The calm bravery inspired by religious fervor of the Pilgrim fathers doubtless drew others to the wilderness of New England; and the doings of the sea-dogs of Raleigh, facing death with a sort of exultation, were told with much approval and listened to with a sense of envy in their homes in Devonshire. The Anglo-Saxon always has been given to "getting on," as the aborigines of distant lands found out, so long as there were any of them left to realize the fact. So now, under less exciting conditions, the same problem of success in life is being solved. Unfortunately, it seems that success for one man often involves detriment or injury to the interests of others. John Doe's way of advancing himself is regarded by Richard Roe as calculated to prejudice his prospects; and then the said Richard Roe turns on John Doe and rates him for acting unfairly. A lively correspondence has been going on in the *Medical Press and Circular* lately on the topic "What is a Medical Advertisement?" Perhaps you, on your side of the Atlantic, are not quite clear on the subject. The advantages which accrue from being able to make the world realize the fact that you are in existence have always been recognized by the worldly, and if a man can only come before the world money will sooner or later find its way into his purse; whether or not he can keep it there is not to the present purpose. One man tries to become known in one way, another man essays the task in a different way; and each is apt to think the other's way just a little unfair. If the guineas do not come in pretty equally, the man with the smaller income will probably charge the more successful man with not acting fairly. The first letter was by a reformer who signed himself "Anti-Humbug." He did not seek to place himself on a pinnacle of self-righteousness and from this height arraign his less lofty fellow-creatures; on the other hand, he said there were various ways of medical advertising, and that to him they seemed pretty much on a level. He spoke the words "with the bark on," thus: "At present, naught save the 'hollow ghost' of a difference exists between the advertisement which is considered legitimate and that which is unprofessional." He then enumerates some of the little ways which seem to him "tricks that are vain," such as "letters to newspapers on medical topics," which, of course, "drum" the writer pretty well; circulating pamphlets under a pharisaical cloak of philanthropy; the delivering of lectures on medical subjects to lay audiences; the insertion of advertisements of medical books in lay papers, and reviews of the same,—as a well-known medical tome was reviewed in the *Times* lately; certain advertisements in the *Lancet*, which, he states, is widely read in clubs and public libraries; the bulletins issued when any distinguished personage is indisposed. Even the humble enterprise of the general practitioner in putting in his surgery-window in large letters his hours of attendance and his modest charges he regards as an "advertisement." He candidly owns that he does not object to any of these schemes; but what he does want to know is, are not all of these ways of making a man known "advertisements"? This letter stirs up another man, who signs himself "Paracelsus," and who pursues the subject. According to him, "legitimate" advertising includes advertisements in medical papers; in the lists of hospitals, which, at least, go to the lay governors; in the lectures delivered before the Royal College of Physicians (chosen by no known rule); and in the bulletins issued when persons of high social position are ill, which carry on them the names of the attending medical men. Apropos of this last

game, which, of course, applies almost solely to the leading consultants, there was a small skirmish in the "Proceedings of Council of the British Medical Association" a few weeks ago. Eighteen leading consultants, medical and surgical, addressed a communication to the Council to the effect that "particulars respecting the sufferings of well-known sick men may possibly be admitted into other journals is no argument in favor of their appearing in a journal published by our Association, one object of which is to uphold the honor and dignity of the profession of medicine." The Council echoed the admirable sentiments of the signatories, but explained that the practice was of old standing, and acknowledged that if the colleges had discouraged such communications the evil would not have continued as it had done. Further, they tendered an explanation by the editor. Of the acumen of the said editor no two opinions exist, and he turned the tables on the signatories most successfully. He said, "The practice of the journal, during a long series of years, has been to communicate with the medical attendants in charge, and to issue the information which they have furnished avowedly for publication. The details in question have, for the most part, been furnished by eminent members of the medical profession, ncluding, in numerous instances, some of the most distinguished of the signatories of the above document." He proceeded to suggest that "the principle regulating the limits within which such information should be supplied to the medical journals for publication should be indicated broadly by the colleges for the guidance of their Fellows." He comforts the signatories that he "concurs in the opinion that the practice in question has of late years grown to an extent which might fairly be considered an abuse," and points to some suggestions made by the journal to correct the said abuse in a previous number. The signatories were pretty well "hoist with their own petard," and the editor scored on the transaction as a whole. From what has been said in this squabble, it would appear that this form of advertising is restricted mainly to "eminent members of the profession," including "some of the most distinguished of the signatories" of the charge. This example of advertising, of course, excites the envy of those to whom it is unavailable. Then "Paracelsus" calls "illegitimate" advertising inserting advertisements of medical books in lay papers. And again it seems that the leaders of the profession are the chief of the sinners, for he says, "the works of men eminent in the Royal College of Physicians figure conspicuously in the impropriety." How ever is it that the venerable old institution in Pall Mall is growing so immoral in her old age? He goes on to ask, "Is publishing a book on a special subject, into which sufferers from the maladies there discussed will peep if so minded, any worse for the interests of the patient than the medical readers of that book taking the said sufferers, not to the men best known in connection with their malady, but to some private friend, because it suits them to do so?—perhaps to one of those consultants who systematically give catch-penny dinners to the general practitioners who, in turn, 'give' them their consultations?" This is touching a very tender matter, and hard words may easily be bandied about on either side. He then points out that in teaching institutions the staff hunt as a pack, and, once admitted into the pack, a member thereof is carried on by his colleagues. That such aggregations of medical men should denounce the practices of others (unnecessary in their own case) is natural enough. He, too, recommends the tearing up of the "unwritten laws" of the College as the best thing to be done—under the circumstances. Then another correspondent points to an announcement which appeared in the morning daily papers recently, that a certain surgeon with a handle to his name was going to perform an operation,—viz., the removal of a splinter from the cheek of Baker Pasha, received in the recent turmoil with the Soudanese. He wants to know who supplied the information to the papers. Once more it is "the heads" of the colleges which the said colleges are recommended to look after specially. Then another sends in a contribution to this "burning question." He thinks the discussion "refreshing," and suggests that two medical registers ought to be kept by the General Medical Council, "one of those practitioners whose first regard is for their profession, and the other of those whose chief care is No. 1." And he again falls foul of the Royal College of Physicians, as lacking in its duty to the profession, and asks it to explain the real status of the Fellows *inside* and *outside* its walls, and speaks of "the invertebrate judges who quail before the powerful and castigate the weak and feeble." There has been a good deal of strong language used up in this discussion, whatever the facts may be. Certain it is that the matter of medical advertising must come, as the last writer says, either to no rules at all or else to some definite rules and that the colleges see that these rules are kept.

It may now be well, in illustration of the controversy, to see what is the position of the two colleges at the present time. To follow what appears in the *British Medical Journal*, the Council of the Royal College of Surgeons is in conflict with its Fellows and members, "who justly demand a larger share in the management of their college." At a meeting of the Fellows and members, certain resolutions were passed and sent up to the Council, which resolutions were promptly rejected. However, the matter has been taken up in earnest by one branch of the British Medical

Association, which, we are told, "is the first shot fired in the campaign," and the members are invited to "support the Fellows in their crusade against the monopoly of power by the Council." These ruling oligarchies are falling upon evil days, clearly. Then, as to the Council of the Royal College of Physicians, what have they been doing of late? For a long time great dissatisfaction has been expressed about the way in which they select Fellows from the members, with all the advantages of lectures and examinerships which the Fellowship carries with it. In a recent discussion it was pointed out that of the last thirty-nine men elected only nine could be said in any way to have won their spurs, while the rest were practically unknown. But what has been the last freak of the Council in a matter where discretion might fairly be demanded? An extraordinary meeting of the Fellows was held on May 29. After some business was transacted, "the next business was the election of new Fellows. Considerable dissatisfaction, however, was evinced by the majority of those present with the list of names submitted by the Council. Dr. Andrew moved and Dr. Sieveking seconded a motion referring the list back to the Council for reconsideration, with full power either to omit names or to insert fresh ones, with the proviso that the total number should not exceed twelve. An animated discussion followed, but finally the motion was carried by a large majority."

What does this mean, in plain English? It means that the scandal of the selection of new Fellows has become so odoriferous that the body of Fellows, "by a large majority," have declined to endorse the list submitted to them by their Council; that the disgrace of the selection has got at last beyond their power of toleration. This is a state of affairs which seems amply to justify the hard words launched at the Council by the various correspondents.

We see, then, at both colleges the Councils ranged in open conflict with their Fellows and members. This condition of matters is disgraceful; indeed, disgraceful is scarcely the word for it; rather the word shameless should be used. What evil spirit prompts the ruling oligarchies in each case to take an attitude so offensive—offensive in every sense of the word—it is not for an outsider to speculate. Talk of a "house divided against itself," but medicine is riven in twain here, both in surgery and in medicine. What can the outside world have to say about the medical profession when such scandals are rife among us? Talk of example being stronger than precept; what precept, what "unwritten laws," could stand against such examples of arbitrary wilfulness? Whether the men who form the Councils of the colleges are borne up by a consciousness of rectitude, or are sustained by a conviction that they are sufficiently firm in the saddle to defy criticism and to believe that wrong will prosper,—a blasphemous denial that God governs his own world,—it is not for me to say. But surely it must be one or the other. For long the sittings of the College of Physicians were held *in camera*. Now that a ray of light penetrates their mysteries, the spectacle is not an edifying one. As long as darkness shrouded their doings, the outside world saw only results, and not processes. Now it gets a glimmering of processes, and what it sees is not inspiriting. How it is that such rule obtains in both colleges, and that in each alike the ruling oligarchy is at daggers drawn with its constituents, is one of those mysteries which the future historian may perhaps be able to explain: it is inscrutable to the contemporary chronicler. Whether it is creditable to the medical profession or not is a matter on which no two opinions can possibly exist.

From such an unedifying spectacle as that just described it is pleasant and "refreshing" to turn to something on which the eye can dwell not only without being offended, but with positive delight. Among the valuable new manuals for students of medicine issued by Cassell & Co., one of the best is that just given to the public on "Materia Medica and Therapeutics" by Dr. Mitchell Bruce. Dr. Bruce has long been looked upon with favor by all as a rising physician, and as a man with a good book in him if it could only be safely extracted from him. Mr. Malcolm Morris is a most skilful obstetrician in difficult literary parturition, and both author and operator are to be congratulated on the result in this case. The importance of the book is not to be measured by comparing it with the works of Ringer, Wood, and Bartholow, all of which are without and beyond the intellectual range of the ordinary student, but by contrasting it with the ordinary student's book, Garrod's "Materia Medica." That this was an excellent book in its early days, at the time when the writer was a student, is readily admitted. But the progress of therapeutics, whether by clinical observation or by experimental research, of the last twenty years has marched on unheeded by it. Without positively exhibiting its nakedness, what it lacks may be suggested by referring to what can be found in Bruce's little book. Here may be found an account of the utility of digitalis when the heart is inefficiently pumping the blood from the full veins into the flaccid arteries; of the effects of strychnine upon the respiratory centre when the respiration is embarrassed; of the good which will accrue from the administration of belladonna when profuse night-sweats are lowering the enfeebled patient into the grave. Here we find a reference to the action of potash as a muscle-poison, and cautions as to this action and how it can be met in practice when the heart-muscle is weak in cardiac dropsy. As to iron and its effects upon the digestive

organs, he tells how it should never be given until the digestive organs are working well, and then it is well to begin with the lighter preparations, and even to give them only after meals. He states that "narcotics are powerful depressants of the respiratory centre," often checking "useful cough" and lowering the breathing, and so ultimately aggravating the condition they temporarily relieve. "Pain and the other forms of distress in connection with this [respiratory] system are easily arrested by direct respiratory sedatives, such as opium, but not without considerable risk. The greatest discrimination must therefore be exercised in having recourse to these remedies, and the routine use of them is to be deprecated," he writes, in words brief but instructive. The utility of a mercurial pill followed by laxative salines when the liver is loaded with uric acid and bile-acids is laid down by one who has had special opportunities of watching the practice of Dr. Richard Quain,—one of the best practitioners who ever lived, or ever will live,—to whom the book is appropriately dedicated.

The necessity for such a book as this just brought out by Dr. Mitchell Bruce may not be so crying with you as with us. But, speaking for myself, I think Bruce's book a boon for the medical students of to-day, especially when they enter upon practice, and still more to those patients who may intrust themselves and their families to these young practitioners. How far such readers themselves may think with me, it is impossible to say. Possibly a few years of practice alone may enable them to estimate its value aright.

J. Milner Fothergill.

P.S.—If any reader should think my strictures in the above letter too severe, he will find my views expressed in two leaders of the *British Medical Journal* of June 7, one on "The College of Physicians," the other on "Medical Self-Respect."

PROCEEDINGS OF SOCIETIES.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Special Meeting, June 6, 1884.

The Vice-President, B. F. Baer, M.D., in the chair.

Dr. WILLIAM GOODELL exhibited specimens of

PYO-SALPINX, AND HYDRO-SALPINX.

In the former case the lady was single, and had suffered from pelvic pains and menorrhagia for several years. Last autumn a tumor was discovered by her physician, who deemed it a fibroid of the womb. Early this year her sufferings became so great that she took to her bed. Very large doses of morphia were needed, and septic symptoms now set in. After she had been in bed for several weeks, Dr. Goodell was called in to see her. The tenderness of the abdomen was now so great that the examination was made under ether. Even then the diagnosis was obscure, because she flinched and her recti muscles became tense whenever the abdominal wall was pressed upon. A cyst was discovered, but of what nature it was impossible to determine. Dr. Goodell operated on her at his private hospital. The womb was studded with small fibroid nodules; posteriorly it had an outgrowth as large as a small egg. Closely adherent to the womb, to the pelvic fascia, and to the intestines was a thick-walled cyst of the left ovary, as large as the largest orange. The corresponding oviduct was very thick and enlarged to the size of a small sausage. It and the cyst were filled with a very dark purulent fluid, although there was no communication between them. The lower end of the cyst had become necrosed, and was so thinned out that it would very soon have given way at that point. On account of the presence of fibroids in the womb, the right ovary was also removed. Attached to the fimbriæ of the oviduct were three very beautiful pedunculated vesicles, while two others, not yet pedunculated, lay in the stroma of the broad ligament. The recovery of the lady was uninterrupted.

In the case of hydro-salpinx the patient was a widow, aged 37, who had been sent to him in order to have her ovaries removed. Severe pains began a week before the menstrual flux, culminating during the flow and continuing one week longer, then fading gradually away. For three weeks out of every month she was confined more or less to the recumbent posture, and wholly so during the menstrual week. A tear of the cervix and one of the perineum had been well repaired by two surgeons, but with no improvement. Dr. Goodell wished her at first to try the rest treatment, with massage, electricity, and graded muscular movements, for he had repeatedly cured cases of this kind through such a mode of treatment. She was, however, too poor to take this treatment privately, and therefore was urgent to have her ovaries removed. The operation was performed fifteen days ago, and she is now doing very well indeed. The ovaries as exhibited were much enlarged, and showed marked follicular degeneration. From this condition Dr. Goodell thought that nothing short of the operation would have cured her. Attached to one oviduct was a delicate vesicle, with a thread-like stem of over an inch in length. In view of the frequency with which they are found, he could not but think that these vesicles played some *rôle* in the economy, and that they had sometimes a pathological bearing. He had on several occa-

sions met with small post-uterine cysts which burst either spontaneously or under the pressure of an ordinary vaginal examination. Taking advantage of this fact, he had quite recently burst one designedly by bi-manual pressure. Such delicate cysts, and also those very movable ones which remained small without increase in bulk, he was disposed to attribute to these vesicles. After bursting, these cysts sometimes refill. One he had known to burst and refill at least six times before it disappeared. Now, small ovarian cysts had, in his experience, thick walls, and, further, they rarely remain small any length of time. Dermoid cysts, on the other hand, often remain stationary for years, but they were generally not very movable, and they also had thick walls.

Dr. ALBERT H. SMITH had found these cases of pyo-salpinx very difficult of diagnosis. He had been present at an operation by Knowsley Thornton upon a case in which the lesion was double and both tubes and ovaries were removed. Rupture had occurred previously and had been followed by peritonitis. The patient recovered.

Dr. B. F. BAER inquired if Dr. Goodell would recommend rupture of cysts arising from the hydatids of Morgagni.

Dr. GOODELL would consider it good surgery for the purpose of preventing the further growth of the cyst. He had always found the fluid in small cysts to be unirritating.

Dr. ALBERT H. SMITH remarked that Schroeder holds that the fluid of an ovarian cyst is not noxious to the peritoneum. He makes no effort to protect the peritoneal cavity from its ingress during an operation, and yet his statistics show a remarkable success.

In response to a question by Dr. C. Meigs Wilson, Dr. GOODELL stated that the dressing of the wound after the operation was glycerole of carbolic acid, with the Lister gauze.

Dr. GOODELL also gave the following history of a

CASE OF HYSTERECTOMY.

The woman was single, aged 47. Her monthly fluxes began to be free in 1867. A year ago they became so exhausting that she could not pursue her trade as a seamstress. On April 30 she consulted Dr. Goodell, who found the whole abdomen filled with multiple fibroids of the womb. The cervix had disappeared, and the os uteri lay so high up that it was not possible to introduce the sound. The operation was performed at the Hospital of the University of Pennsylvania on May 22, on the same day with the preceding case. One outgrowth, as large as the two fists, contained a cavity filled with cheesy matter, and was so adherent to the abdominal wall and intestines as to need the knife for its release. It was possibly the right ovary, but he was by no means certain. Koeberle's wire clamp was passed around what corresponded with the neck of the womb, but it was as large as his arm above the elbow. The woman's recovery thus far has been uninterrupted. The temperature reached 100° but once. The clamp fell off on the sixteenth day, leaving a very deep funnel-shaped pit. He had intended to exhibit the specimen, but it was too bulky to carry and also had become quite offensive. In this case, had he been able to reach the ovaries or to discover them, he would have removed them in preference to performing hysterectomy; but the firm adhesions prevented the rotation or the lifting up of the tumor, hence the ovaries were inaccessible. Sometimes, even when the uterine fibroid can be lifted out of the wound and the ovaries reached, these organs are so embedded in the fibroid, or so drawn out in ribbon-form on the surface of the tumor, as to make their complete removal impossible. When, however, the ovaries can be removed with safety, the operation is a most promising one, as he could attest from several very successful cases.

Dr. W. T. TAYLOR reported the following case of

PARTIAL PLACENTA PRÆVIA.

Mrs. S., an Englishwoman, aged 46 years, the mother of ten children, came to see him in December, 1883, in consequence of abdominal pains, headache, and vertigo, with a suppression of her menses, which she attributed to a "change of life," as she had been irregular for a year past. She also had numbness with tingling in the hands and feet, and had not been so affected in any former pregnancy. Consequently, she would not believe in her condition until some weeks later, when she quickened. In the month of February last she had enlargement of the veins of the legs, with œdema of the feet and ankles, for which she took occasional doses of potassium bromide, with a solution of cream of tartar (℥j to a pint of water) to be taken freely. By this treatment she was temporarily relieved.

On March 27 she had abdominal pains and a profuse hemorrhage, which saturated her clothing and greatly alarmed her. On examination, Dr. Taylor found the os uteri high up and slightly open. Although the hemorrhage diminished, yet the pains would recur at intervals, and he fully expected labor would soon begin. Under the use of equal parts of wine of ergot and solution of sulphate of morphia, she began to get easier, and in a few days was out of bed and able to resume her household duties, feeling more comfortable, as the enlarged veins were smaller, her feet and ankles had diminished in size, and the headache gone entirely. He told her that nature had come to her relief, and bled her without his ordering it.

Feeling satisfied that this was a case of

placenta prævia and that there was no immediate danger, he concluded the most prudent course was to let nature alone and wait until labor began. She had no more trouble until May 10, when she passed a large clot of blood and complained of slight pains in the abdomen; these occurred occasionally for two days, when the membranes ruptured and a sudden gush of water followed by a flow of blood indicated that labor had begun. On examination, he discovered within the os a spongy, ragged, bleeding mass of tissue, which was recognized as the placenta; with each pain the flow of blood increased as the cervix dilated. Sweeping his index finger around within the mouth of the womb as far as he could reach, to detach the placenta from the uterine walls and assist the first stage of labor, he felt the fœtal head beyond.

To arrest the bleeding, which, if it continued, would exhaust the mother and destroy the child, he plugged the vagina completely with strips of old muslin well saturated with lard, and waited patiently for the os to dilate and the head to advance, giving at the same time occasional doses of quinine and wine of ergot, as a tonic and stimulant. In about an hour the advancing head had expelled a part of the tampon, and, on removing the remainder, he found that the bleeding had ceased and the vertex was presenting in the left occipito-posterior position. Auscultation revealed a feeble fœtal circulation; but, as the pelvis was roomy and the patient somewhat exhausted, he gave her freely of milk-punch until her pulse became stronger, which it did in half an hour, when, as the head had ceased to advance, he applied the forceps and delivered her of a medium-sized girl, which in a few minutes began to cry with some vigor, contrary to expectations, for he had told them it would probably be dead. Its vitality had been preserved by the adhering part of the placenta, which then came away quite easily. A teaspoonful of fluid extract of ergot contracted the womb firmly. The patient was weak for several days, but, under the use of tonics, with nourishing food, she soon recovered her usual strength.

Dr. A. H. Smith remarked that this case, being partial and without profuse hemorrhage, could have been best carried through by rupturing the membranes and bringing down the head, which would have stopped the hemorrhage as soon as it engaged in the superior strait. Dr. Smith asked the question, Under what circumstances are we warranted in interfering? If the hemorrhage be alarming and the patient exhausted, she is in a poor condition to bear interference; and, on the other hand, we have no right to interfere if there be no pain or hemorrhage. To interfere by manipulation is very dangerous, unless the uterine contractions are rapid and effective after labor once begins. The position of the child should be carefully and accurately determined by external manipulation before interference becomes necessary, so as to know where to seek the feet if turning becomes imperative. When the placenta prævia is complete, dilatation of the os causes a terrific hemorrhage, the blood streams from the patient like water from a hydrant or a small fire-plug, and death comes very quickly. Only perfect knowledge of the condition of things and the position of the child will enable the physician to avert the doom. Now, as to the tampon. He would not use it. It hides the hemorrhage which may be going on profusely behind it, as was so vividly described by Dr. Goodell in his paper on "Concealed Accidental Hemorrhage of the Gravid Uterus" in vol. ii. of the *American Journal of Obstetrics*, in which he showed that the woman might bleed to death without one drop of blood escaping externally. The tampon conceals the hemorrhage without necessarily preventing it, and, while it remains in place, one hand of the physician should be constantly on the patient's pulse, to note instantly any failure of the heart, while the other should be on her abdomen, to note any changes in size of the uterus or position of the fœtus. In Dr. Taylor's case the treatment was beyond criticism, because the result has been happy.

Dr. Goodell agreed with Dr. Smith that placenta prævia is the most formidable complication in obstetrics. No general rule can be made applicable to the treatment of all cases. In partial ones the membranes should be ruptured and the head brought down. It must always be borne in mind that in these cases the implantation of the placenta has caused increased vascularity and thickness of the cervical walls: they are easily ruptured, and, if torn, bleed profusely. There is greater danger of septicæmia from absorption of decomposing lochial discharges when passing over this surface if it be torn. He well remembered one case which he attended years ago in consultation with Dr. Augustin Fish, since deceased, in which, in consequence of what he now considers undue haste, lacerations of the cervix occurred, and, although the labor terminated happily, septicæmia set in a few days later and resulted fatally. It would have been better in that case to tampon. When the placenta is not central there is very little danger; there is some. The tampon may be used, but the pulse must be constantly watched, and frequent abdominal palpation should be made. He had been struck with the method practised by Dr. Ellwood Wilson more than twenty years ago. It consisted in gentle digital dilatation of the os, introducing first one finger, then two, and so on; as soon as sufficient space was obtained, he gave ergot, made podalic version, and delivered. Very few practitioners advise that method. Dr. Goodell had not met with many cases, and the one

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spoken of above was the only fatal one. He has used Barnes's dilators, taxis, strength, and courage, and has tried to adapt his treatment to the indications of each particular case.

Dr. W. H. PARISH thought the tampon was not used as frequently now as it was a few years ago, either in the form of Barnes's dilators or of the vaginal plugs. Under similar circumstances, he would probably do as Dr. Taylor did. Partial placenta prævia is not very dangerous; but in complete, the hemorrhage is excessive. In one case he had tamponed for several hours, when, the os being dilated, he etherized, and rapidly delivered a living child. The mother was in imminent danger of death from hemorrhage. The abdominal aorta was compressed, and ice was used to the cervix, but without success. The hemorrhage was controlled by the application of a cloth wet with Monsel's solution to the denuded cervical and uterine surface.

Dr. TAYLOR had used the tampon in several cases of partial placenta prævia and in numerous cases of abortion, and had never yet had bleeding to go on behind it. The line of treatment practised in this case had always proved satisfactory as regards results.

Dr. GOODELL remarked that the womb at term was large, and concealed hemorrhage might be free enough to cause death, but that there was no such danger in an abortion at two or three months.

W. H. H. GITHENS,
Secretary.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, JUNE 11, 1884.

R. W. AMIDON, M.D., Chairman *pro tem.*

FIBROUS TUMOR OF THE BREAST—TUMOR OF THE PENIS—LIPOMA OF THE SHOULDER.

DR. WACKENHAGEN presented three specimens, from different patients, which he referred to the Microscopical Committee. The tumor of the breast, which weighed nine ounces, began to develop twenty-five years ago as a small lump, and during the last two years had become painful. A tumor weighing two ounces was removed from the axilla. An imperfect examination pointed to a fibrous growth. The wound had entirely healed under bichloride and iodoform dressing by the eleventh day.

TUBERCULAR PERITONITIS IN A CHILD.

Dr. NORTHRUP presented the intestines of a child which died at the fourth year of age, of tubercular peritonitis. It had been out, attended by a nurse, and was reported as in good condition, but was brought to the New York Foundling Asylum in February with ascites. While in the hospital, the fluid in the abdominal cavity became more or less boggy, and finally ceased to change position when the child was turned from side to side. There were no other symptoms, except those of bronchitis and occasional attacks of constipation. Death took place from exhaustion. At the autopsy, when the abdomen was opened, the parietes were found to be closely adherent to the mass within. The liver, spleen, stomach, and large and small intestines, constituting one mass, were glued together by a gelatinous-looking substance. The liver, spleen, and kidneys contained a few miliary tubercles. In the lungs the tubercles were scattered throughout, and there was diffuse pneumonia and œdema. The brain was not examined. One ureter was much dilated, due, probably, to a constriction arising from adhesion. Ulcers in the intestine had perforated the gut. The peritoneum contained throughout its connections large round tubercles. Dr. Northrup remarked that this was the only case of the kind which he had seen in a child, although he had made examinations in the case of over two hundred children who had died of tuberculosis. He believed that death from tubercular peritonitis was not very uncommon in the adult, however.

Dr. PEABODY said he had not seen such a case in a child. He thought it was not very uncommon in the adult.

Dr. PETERS had seen tubercular peritonitis in two children in the same family, one being between 2 and 3 and the other between 4 and 5 years of age. There were first only symptoms referable to the bladder, and afterwards to the brain. In these cases, also, the tubercles were not limited to the peritoneum, but were found in the liver, spleen, and kidneys as well. The brain was not examined. There was no family history of tubercle.

Dr. FERGUSON, some time ago, made an autopsy in a case in which the physicians had made a diagnosis of an ovarian tumor, there being an abdominal tumor, and he found, on opening the abdomen, that there had been a perforation of the intestine, as in Dr. Northrup's case, and the escaped contents became limited by inflammatory substance and presented the appearance of a tumor.

TUBERCULAR MENINGITIS IN A CHILD.

Dr. KNIGHT presented a part of the brain of a child which died of tubercular meningitis at 1 year of age. The case was somewhat interesting, on account of a family history of syphilis leading to the suspicion of syphilitic meningitis. The child had been sick about five days when Dr. Knight was called. On the sixth day the patient was apparently unconscious, the head rolling from side to side, occasional muscular twitchings, the pulse regular, the temperature not elevated, or but slightly so. No nourishment was taken. The second day after he saw her, she was lying on the left side, apparently asleep, the left arm and leg being drawn up and down constantly. The right side was motionless. The movement of the left arm and leg con-

tinued day and night. There was some movement of the jaw at his visit on the third day. There were occasional twitchings of the lids on the sixth day, and the eyeballs were constantly moving. The left arm now became rigid. There was a violent spasm of the right side on the seventh day, and three hours later the child died. The temperature did not go above 101° F. At the autopsy, tubercles and a translucent membrane covered a considerable portion of the base of the brain. The father had contracted syphilis about five and a half years before the birth of the child, and about a year later the mother became infected. During the first year of the mother's infection a child was born which presented the signs of syphilis. The child from whom the specimen was presented was born during the fifth year of the mother's infection. It had no lesions at birth, nor afterwards. Dr. Amidon, who made the microscopical examination, had at first supposed there was syphilitic lesion, but it proved to be apparently purely tubercular.

Dr. AMIDON remarked that in certain cases, as in the present one, we find the gross lesions appear more like those of syphilis than of tuberculosis, while the microscopical examination discredits the theory of syphilis.

Dr. NORTHRUP thought the symptoms pointed pretty clearly to tubercular meningitis.

Dr. PEABODY said a woman was admitted to New York Hospital suffering from symptoms of meningitis, from which she died. At the autopsy he found a condition of things very similar to that which Dr. Knight had described as covering a part of the base of the brain and extending down on the anterior surface of the spinal cord,—a thick, gelatinous-looking substance, from an eighth to a sixteenth of an inch in thickness, quite clear, and containing no tubercles. There was perivasculitis, and, in some places, endarteritis obliterans, which led him to believe it was syphilitic. There were no tubercles any place. Possibly in Dr. Knight's case there was both tuberculosis and syphilis.

Dr. NORTHRUP thought that, as a rule, in well-developed tubercular meningitis there was a gelatinous layer at the base of the brain, which was apt to be of a greenish color.

Dr. VAN GIESON thought twelve days rather a short course for tubercular meningitis. Cases in which there was a large amount of congestion were more likely to be attended by the gelatinoid effusion. With regard to whether or not syphilis may have been an etiological factor in Dr. Knight's case, he thought that in children dying from a syphilitic lesion of the brain there were almost always previous skin-lesions. The low temperature in this case was not extraordinary. He had attended a case of tubercular meningitis which terminated in death, the temperature at no time going above 100° F., although it was taken frequently and with different reliable thermometers. He replied to a question by Dr. Amidon that if there should be a sudden rise of temperature it was likely to be pre-agonistic. This, however, by no means always occurred. The symptoms presented in the case narrated by Dr. Knight were not unusual.

Dr. AMIDON thought there was always a pre-agonistic rise of temperature in tubercular meningitis. He then presented microscopical specimens illustrative of the disease as it occurred in a child 5½ years old. There was a strong family history of tuberculosis. The child had always been well, but was sensitive to cold. Three weeks before the fatal illness it began to cut its back teeth, and was very irritable, and then began to act in a manner pointing to meningitis,—not wishing to be disturbed, preferring a darkened room, irritable. At seven o'clock of the morning of the last day of life the patient was, for the first time, seized with general convulsion. It had been sleeping well during the night, and awoke conscious. It lost consciousness, the eyes remained open and fixed, and it lay bathed in a warm perspiration, the temperature being 105°. Death took place at noon. At the autopsy the base of the brain was found studded with miliary tubercles. The other viscera were not examined.

Dr. PETERS remarked that he had found the primary symptoms of meningitis more variable than in almost any other disease. Supposing it might first invade any one of the nerves at the base of the brain, it might give rise to corresponding symptoms. He knew of no affection in which it was more difficult to make a definite diagnosis during the first four or five days than in tubercular meningitis.

Dr. AMIDON regarded the preceding stage of irritability, inability or disinclination to walk and be disturbed, and desire to rest quietly in a dark room, as almost pathognomonic of the onset of the disease.

Dr. J. LEWIS SMITH, who had just arrived, being asked his experience as to the course of the temperature in these cases, said it had, in his practice, varied in height according to the extent of the meningeal inflammation. If the amount of inflammation excited by the tubercle were moderate, the febrile movement would be mild. He had been interested in Dr. Peters's remark as to the difficulty of making a diagnosis early in the course of the disease. He had frequently been called to see cases in which the physician had previously diagnosticated remittent fever.

ANEURISM OF THE INTRA-VENTRICULAR SEPTUM—ANOMALY OF THE LIVER.

Dr. FERGUSON presented the liver and heart of a boy who died at the fourteenth year of age, having for two months before admission to the hospital complained of shortness of breath,

weakness, and loss of appetite. On admission, he was fairly nourished. The face looked puffy, he was anæmic and cachectic, and suffered from dyspnœa, the breathing being principally diaphragmatic. The pericardial area was increased, and a harsh cardiac murmur was present. He died quietly two days after admission. The cavities of the heart were dilated. One of the aortic cusps was nearly destroyed, and just above it was a small, smooth opening in the aortic wall, which communicated with the intra-ventricular septum, leading to an aneurismal sac about half an inch in diameter. Above the opening into this sac was extensive ulceration of the aortic wall. The left lobe of the liver was only rudimentary; the right was roundish in form, and on its surface were a few small nodules. The gall-bladder was divided by a septum into two lobes. This was the first time that Dr. Ferguson had seen this anomaly.

FIBROUS AND FATTY DEGENERATION OF THE HEART-WALLS.

Dr. PEABODY presented the heart removed from a German woman, 56 years old, who died in the New York Hospital after having been under observation for about two weeks. The history was quite meagre. She was the mother of seven children; had been in comparatively good health until four months before admission. Twelve years ago she had suffered from cardiac palpitation. On admission, she suffered from dyspnœa. There was œdema of the lower extremity, of the lower half of the abdominal walls, and there was also marked ascites. When she first entered, she passed more urine than normal, but the amount gradually diminished to twelve ounces, and even lower. It contained albumen and hyaline and granular casts. The specific gravity was in general low. The liver was dislocated downward, and gave rise to difficulty in diagnosis.

At the autopsy the kidneys were found to be the seat of parenchymatous and interstitial nephritis. The heart was both dilated and hypertrophied. The valves were normal. The point of greatest interest was the presence of a large amount of fibrous tissue in the walls of the left ventricle, especially at its apex, where the walls were very thin. The microscopical examination showed in the immediate neighborhood of the white fibrous tissue fatty degeneration of the muscular walls, while just beyond the walls were normal. The endocardium was everywhere thickened. There was an abundant atheromatous deposit in the aorta, surrounding the coronary arteries, and in the mitral valve. The valves were competent. There was slight degree of cirrhosis, and marked evidence of tight lacing. The peritoneal cavity contained twenty-five hundred cubic centimetres of fluid. Dr. Peabody said that, clinically, this form of cardiac hypertrophy without valvular lesion gave the patient greater distress than any other. Here there was no valvular lesion, no murmur, no apparent interference with the function of the heart; but there was marked hypertrophy of the ventricular wall, which subsequently gave place to dilatation. In reply to a question by Dr. Van Gieson, whether angina pectoris was present, Dr. Peabody said it was not; but he presumed that was to be accounted for by the fact that the occlusion of the coronary arteries had not yet reached a sufficient degree. He thought that any condition causing their occlusion might give rise to the symptom.

Dr. PETERS referred to two cases in which patients suffering from angina pectoris died suddenly, and obstruction of the coronary artery was found.

REVIEWS AND BOOK NOTICES.

VOICE, SONG, AND SPEECH: A PRACTICAL GUIDE FOR SINGERS AND SPEAKERS. By LENNOX BROWNE, F.R.C.S. Ed., and EMILE BEHNKE. 322 pp., 40 illustrations. Published by G. P. Putnam's Sons, New York, 1884.

This volume was conjointly written by the well-known laryngologist Dr. Lennox Browne and Mr. Emile Behnke, a successful teacher of vocal music, and embodies the experience of these two well-trained observers. They had come to the conclusion that the wrong use or abuse of the voice was the chief cause, in most instances, of voice-failure, and that the scarcity of fine voices was due less to dearth of material than to faults in its cultivation and exercise; and as a result of the recognizance of these facts we have before us this volume.

The first chapter, which forms an introduction, is headed "A Plea for Vocal Physiology," and in it are set forth in a masterly manner the reasons why every singer and teacher of vocal culture should be well versed in the physiological laws governing the production of voice both in singing and in speaking. One or two extracts from the chapter give a clear idea of what the book contains and what aim the authors pursued in writing it. Thus, they say, "All public speakers as well as singers should receive a scientific training in the mechanism and right employment of the organ of voice. It is precisely here, on the threshold of their art, that many elocutionists fail. They occupy themselves with articulation, pronunciation, intonation, modulation, emphasis, and gesture, and having but little, if any, physiological knowledge, are therefore unable to form a true basis of voice-production;" and, further, "Unfortunately, but little attention is paid to this fundamental training; and it is only when singers, and especially speakers,

find their voice fail that they begin to think they have not used the organ aright;" and, finally, "By the term, a highly cultivated voice [in speaking], is not meant the application of those rules of reading which are taught by elocution masters, but a cultivation of the voice on sound acoustic and physiological principles, analogous to those which are so eminently successful in cultivating the voice of song." Only he who has had experience in the treatment of laryngeal diseases the direct result of abuse of the voice, can appreciate the truth of this.

Then follow chapters on acoustics, speaking and singing, anatomy and physiology of the organs of voice, etc., and finally two chapters on "The Ailments of the Voice-User" and on "Defects of Speech." In the former of the two the different ailments are treated under the heads of "catching cold," "sore throat," "pharyngitis, or inflamed throat," "clergyman's sore throat," "elongation of uvula," "enlargement of tonsils," etc. The authors strongly advocate the removal of hypertrophied tonsils by ablation, and the amputation of elongated uvula, and go at length into the consideration of the deleterious effects produced upon the voice by these pathological conditions, but throughout the chapter, and, in fact, throughout the whole book, no mention is made of the influence of pathological changes in the naso-pharynx and nasal cavities upon the voice,—an omission which is to be deplored, since it makes this otherwise excellent work imperfect.

The last chapter treats of "Stammering and Stuttering," and in it is given, as the most common cause of this defect of speech, a faulty respiration. The treatment consists in surgical interference if such is necessary, and in education of the organs of articulation. The authors conclude with an appendix describing the process employed in photographing the living larynx in the act of singing, and contains a letter from Dr. Wyllie on approximation of the pocket-ligaments in voice-production.

The illustrations are partly wood-cuts, printed in the text, and partly mechanical reproductions of the excellent photographs of the living larynx and palate, taken by Mr. Browne. C. S.

BRAIN-EXHAUSTION, WITH SOME PRELIMINARY CONSIDERATIONS ON CEREBRAL DYNAMICS. By J. LEONARD CORNING, M.D., etc. New York, D. Appleton & Co., 1884. Pp. 234, 8vo, cloth.

Although an admirer of Dr. Hammond and the late Dr. George M. Beard, the author is not willing to accept the comprehensive term neurasthenia as representing a satisfactory diagnosis in many cases of cerebral functional disease; nor does he endorse the extravagance of nomenclature indulged in by Dr. Beard in his labored classification of the different varieties of morbid fears. Dr. Corning regards brain-exhaustion as an expression of defective cell-nutrition in the hemispheres, the causes being predisposing and exciting. Among the former are considered false educational conceptions and methods, vicious mental habits, abnormal living, worry, and anxiety; and among the latter the evil effects of tobacco and alcoholic excesses are prominent, and also idleness or insufficient employment for the mind, and excessive sexual indulgence.

The work is divided into Preliminary Considerations; Clinical and Pathological; Causation; and Considerations on the Principles of Treatment. The greatest stress is, very properly, laid upon hygienic treatment, food, and regularity in sleep and exercise. The use of sedatives is deprecated as the rule, and bromides are to be used with caution. In sleeplessness due to anæmia, the author suggests that a few drops of nitrite of amyl may be inhaled, or, in the contrary condition, chloroform may be cautiously administered. The improvement of nutrition being one of the main features of the treatment, the patient should have easily-digested fluid nourishment at intervals during the night, if he should wake. The value of nitrogenous food in brain-exhaustion is insisted upon, and wine of coca is highly praised as a restorative. The author, in conclusion, describes an apparatus for compressing simultaneously the carotids and stimulating by electricity the trunk of the sympathetic, which he believes to be a valuable aid in the treatment.

The introductory section is less satisfactory than the remainder of the work. The correlation of the physical forces and mind is certainly not so susceptible of easy demonstration as Dr. Corning apparently thinks it is. Certainly he is hardly warranted in referring to the views of those who disagree with him as absurd. With this exception, the book is one to be read with interest and advantage. How many cases of cerebral exhaustion have been neglected as "only hysteria," or, on the other hand, mistaken for insanity and threatened with incarceration, it is impossible to know; but it is certain that by an early recognition of this condition of functional disorder of the brain, followed by appropriate regimen, a case will often recover; but chronic cases accompanied by organic changes are, almost without exception, incurable. F. W.

OPERA MINORA. By EDWARD C. SEGUIN, M.D. New York, G. P. Putnam's Sons, 1884.

In the preface of this book, Dr. Seguin states that "an apparently unlimited interruption having taken place in my professional life, the idea occurred of reprinting my various medical contributions for private circulation." Before, however, the idea could be

incarnated in black and white, Dr. Seguin has remarried and returned to professional activity, so that the present volume may be looked upon as a jubilæum. To criticise or to praise a book like this seems to be a work of supererogation. All of its very varied contents have been long before the profession. Much of it, indeed, is of interest chiefly as past landmarks whose distance reveals how rapid is the present onward rush of medical progress and how far in professional lore and thought even yesterday is from to-day. The reputation of Dr. Seguin, the virtues and faults of his work, the extent of his labors and of his originality, every page of the present volume—are they not in the mouths of all men? And others, like ourselves, will no doubt treasure the book, and place it upon their shelves as the historical record of sixteen years' (1866 to 1882) labor on the part of one of our most active and successful neurologists. It seems to contain all—good, bad, and indifferent—that Dr. Seguin has written, except, perhaps, editorial matter. Addresses, clinical lectures, reports of cases, and clinical, pathological, and therapeutic articles are encaged as a most happy, peaceful family between the shagreened black covers. The number of these papers is nearly one hundred, and their subject-matter as varied as may be.

It is a somewhat remarkable fact that so few medical writers over thirty-five years of age consider it necessary to read modern literature concerning drugs before they make positive assertions as to the action of such remedies; remarkable how, with contented mien, they put forth the well-chewed cud of husks swallowed during their student-life, and expect that no one will say aught as to the ancient and musty odor of the mass. If any unfortunate student of to-day, having read the present volume, should at his examination say, with its author, "Conium is the typical medicine of this class [spinal depressants], and seems to be the direct antagonist of strychnia," he would probably have to be carried out upon a shutter, mortally wounded. In clinical pathology Dr. Seguin is strong, but in regard to the physiological action of remedies he is hardly a Samson. H. C. W.

SEXUAL NEURASTHENIA. By GEORGE M. BEARD, A.M., M.D. New York, E. B. Treat, 1884.

This book of some two hundred and seventy small pages of large type is published under the editorship of Dr. A. D. Rockwell, as a posthumous work, or, if we may believe the assertion of the title-page, it is a posthumous manuscript. It represents in strong relief the faults which, to a greater or less extent, are manifest in all of the books originated from its author,—a wearisome spreading out of material, a dilution with words, as though thought, like Hahnemannian medicines, could be potentized by attenuation; the presence also of the feeling that "I am one, and the whole profession another; the books say this, but I say that."

There are, however, a few things worthy of note. One very important idea is brought out more strongly than is often seen,—namely, that sexual exhaustion is often a purely local affection, and not connected with or dependent upon any general neurasthenia. A second fact which is noted by Dr. Beard, and which our experience confirms the verity of, is that in some cases asthenopia is directly related to sexual exhaustion.

If the reader of the treatise can gain any practical help from the chapter on the treatment, he will be more fortunate than we have been. In conclusion, if judgment must be passed, we would advise the outlay of any private library funds in a different direction from this work, which may be worthy of a few minutes' overlooking, but of nothing more. We hardly think it will add to Dr. Beard's reputation, and unless, being read by the victims of sexual disease, it adds to Dr. Rockwell's practice, it had better not have been published: possibly it might have been condensed into a good journal article.

H. C. W.

HISTORY OF THE DISCOVERY OF THE CIRCULATION OF THE BLOOD. By HENRY C. CHAPMAN, M.D., Professor of Institutes of Medicine and Medical Jurisprudence in Jefferson Medical College. Philadelphia, 1884. 8vo, pp. 56.

This essay was delivered as a lecture before the class of the school in which the author is professor, and will constitute, as we are told, with but little modification, one of the chapters of a work on "Physiology" he is now preparing for the press. As such, it calls for a more extended notice than it would if it were merely an ordinary address before a class of students.

The story of the gradual discovery of the way the blood moves through the body is here related very clearly, and in a popular style, calculated to interest greatly the young men to whom it was told. We do not know, all things being considered, in what other place this instructive history is set forth in a more entertaining way.

The historical part of the article "Circulation" in the *Dictionnaire de Médecine* has the name attached to it of Gerdy. Deeply learned, conscientious, and painstaking to the last degree, Gerdy was eminently qualified for such an undertaking, and it is difficult to see how any history of the way in which our present theory of the circulation of the blood was gradually established by many observers during the course of some fifteen centuries can ever excel the one which Gerdy has given us. However, this is an article not often read by the class of students to whom

this present essay is addressed, and they are not likely to be benefited by it, unless it be indirectly.

We are told, as said before, that this essay will be published as a chapter in a work on physiology, with "but little modification." Let us hope that "little" here means *non multum, sed multa*. There are a number of small errors, typographical and otherwise, which should be, and doubtless will be, corrected. In the very first line we read, "In the *minds* of every one;" and in the last sentence but one we are told that "with the progress of knowledge, however, the *significance* of discoveries made often ages ago and long forgotten *become*, in time, apparent to all." [*Italics* by the reviewer.] An eminent scholar is at the bottom of one page *D'Aremberg*, and at the top of the next *Daremberg*. Servetus certainly never wrote *de Spiritus Sancto* (page 16); nor did Fontenelle write *éloge* without an accent in the *Hist. de l'Acad. [des] Sciences* (page 53). Les Œuvres complètes d'Hippocrate, par É. Littré, in ten volumes, is thus referred to: "*Euvres completes d'Hippocrate, par E. Littré, Tomes 8.*" It is doubtful whether Aristotle would recognize his Ἱστορία as Ιστορια (page 8). He certainly would not, unless pronounced according to the accents.* Page 11: "Their very name, artery, from *αηρ, air*, and *τηρεω, I carry*, conclusively proves how absolutely ignorant," etc. As *τηρεω* never was made to mean *I carry* by any Greek writer, it is rather hard thus to consider absolute ignorance as conclusively proven.

We point out a few of the errors, the result of haste, and maybe of carelessness, to be met with in this very interesting essay, and hope to see *many* modifications, and not *much* modification, in the forthcoming treatise on Physiology. AMICUS PLATO.

THE GENERAL PRACTITIONER'S GUIDE TO DISEASES AND INJURIES OF THE EYES AND EYELIDS. By LOUIS H. TOSSWILL, B.A. London, F. & A. Churchill.

This little manual, the author states, is intended for the use of the general practitioner, and not for those who have time for the perusal of larger works. The first two chapters are devoted to methods of examination; then follows a description of the various forms of conjunctivitis and diseases of the cornea. Chapter XIV. is devoted to the consideration of iritis; a chapter is given severally to cataract, glaucoma, sympathetic irritation and ophthalmia, diseases of the lids, diseases of the lachrymal apparatus. Part II. deals with injuries of the eyes, as from burns, scalds, injuries, etc. In our opinion, this section is the more valuable of the two, because it deals with what may be called the emergencies of eye-surgery: with these any practitioner may be obliged to cope, and the chapters referred to would doubtless be of great aid. We think, however, that any one who attempts to treat even such common affections as conjunctivitis or iritis should not limit himself to so elementary a treatise as the one under consideration. Experience has repeatedly demonstrated the folly and peril of such a course. H.

* Some years ago, a gentleman we knew dined at the table of the Archbishop of Canterbury, and he told us that he had occasion to refer to Kingsley's novel, and he called it Hypátia. No one there knew what he was talking about, until some one cried out, "The gentleman means Hypatía."

GLEANINGS FROM EXCHANGES.

TREATMENT OF NÆVUS BY A NEW METHOD.—Dr. H. O. Marcy, of Boston, in a communication to the *Archives of Pædiatrics*, recommends the following ingenious method of treatment of angeiomatous growths, in order to avoid destruction of tissue and subsequent contraction and cicatricial deformity. He uses for the cure of a variety of vascular growths a suture which he has called "the shoemaker's stitch," since in it the ligature is carried, by means of a long needle set in a handle, in opposite directions through the same puncture, the eye of the needle being near to its point, which is without cutting edges.

Armed with the ligature, the needle is thrust deeply under and quite away from the vascular growth. The ligature is then detached from the protruding point, and the other end of the ligature threaded and then drawn out with the needle, which is reinserted close to the first puncture, and thus the process is continued until the entire mass is enclosed, and fixation is completed by a single knot. In this way uniform and steady pressure can be attained, and maintained as long as desired. A report of a case is appended, of a large nævus on the chest, the action of the ligature being aided by a firm compress. It was also found necessary to make two parallel incisions, one on each side of the growth, in order to facilitate the operation and render the constriction less painful. Such incisions are not usually necessary, however. The ligature was removed on the fifth day. Now, two years after the operation, the result is perfectly successful, with but little cicatricial contraction.

POPULAR RECOGNITION OF THE VALUE TO THE COMMUNITY OF MEDICAL SCHOOLS.—The recent gift of Mr. Andrew Carnegie to Bellevue Hospital Medical College of fifty thousand dollars to be expended in the erection of a laboratory building and apparatus for practical work in everything relating to microscopical and experimental research in different departments of medicine, calls to mind the gifts of Mr. John Welsh and Mr.

Henry O. Gibson, the Bloomfield H. Moore fund and the Rhea Barton fund, and other evidences of public appreciation, which have been repeatedly manifested to our own University of Pennsylvania. The Johns Hopkins University owes its existence to the generosity and practical wisdom of a layman. The Gross Professorship of Pathological Anatomy has been proposed in the interests of higher medical education, and is receiving contributions from the profession. We hope the good example that has been set by a few will be followed by others, in order that the schools may possess abundant facilities for teaching medicine in the best manner. In connection with this, we should also note the fact that the Western Reserve Medical College has lately been the recipient of a handsome donation from one of Cleveland's prominent citizens, sufficient to furnish ground and put up a building in that city which shall be especially adapted to and equipped for the purpose of giving instruction in medical science; and it is believed that the College will also receive an endowment from the same source.

INOCULATION FOR PROTECTION FROM YELLOW FEVER.—In a letter to the *Sanitary News* (June 15), Dr. Domingos Freire, of Rio Janeiro, states that he has "vaccinated four hundred and fifty persons, for the most part foreigners recently arrived. Freedom from yellow fever has been pronounced among those thus vaccinated, for they have passed through a quite severe epidemic, and only six deaths have occurred among the four hundred and fifty vaccinated persons, that is to say, less than two in a hundred, while more than a thousand deaths have occurred among the non-vaccinated,—the mortality of the non-vaccinated sick being about thirty to forty per hundred." Barring the very evident flaw in the reasoning, it would appear that Dr. Freire had certainly very good reason for continuing his observations. It would be very interesting to know how long the effect of the inoculation persists, and what are its remote results.

POISONING BY HYOSCYAMINE.—In the *Physician and Surgeon* for June, 1884, is an account of a case, by Dr. A. J. Burdens, of accidental poisoning by a solution of Merck's amorphous hyoscyamine. The patient, 75 years of age, who had taken a quantity equivalent to three grains of the alkaloid, was found in an unconscious condition, his head thrown back with some rigidity, face flushed, pupils dilated, pulse rapid, arterial tension much diminished, and breathing stertorous and labored.

A soft-rubber catheter was introduced through the nostril into the œsophagus, and mustard-water thrown into the stomach, which produced free emesis. The stomach was then washed out with tepid water, and a quarter of a grain of morphia given hypodermically. Cold applications were made to the head, and the morphine was repeated every two hours in decreasing doses. When he returned to consciousness (after several hours), he could not speak for a time, owing either to excessive dryness of the throat or paralysis of the muscles of phonation. For a few days he complained of dryness of the throat and of a ropy, tenacious mucus, which was expectorated with difficulty and considerable pain. To relieve this symptom, jaborandi was given, with happy effect. The remarkable features in the case were the absence of any physiological or toxic effects from the morphia, of which a grain and a half was given in all, and the rapidity with which the throat-symptoms yielded after giving the jaborandi.

SUPRAPUBIC LITHOTOMY IN A WOMAN.—Lawson Tait reports a case in which a calculus occurred in the bladder of a woman who had been the subject of a plastic operation for a large vesico-vaginal fistula in which the cervix uteri had been turned into the bladder permanently, menstruation occurring into its cavity. Two years later she had symptoms of stone in the bladder; the calculus was then removed by crushing. Subsequently another stone developed, which was inaccessible through the urethra. Not wishing to undo the work already done, which had required seven operations to complete, Mr. Tait performed suprapubic lithotomy and removed the stone. Although the peritoneum was opened, the patient made a good recovery. The peritoneal wound was carefully closed, and a drainage-tube passed through the urethra and the wound. The stone was a soft phosphatic concretion, and was adherent to the sac in which it had formed.—*Medical Press and Circular.*

A NEW TREATMENT FOR NEURALGIA.—The latest agent introduced for the relief of neuralgia is a one-per-cent. solution of hyperosmic acid, administered by subcutaneous injection. It has been employed in Billroth's clinic in a few cases. One of the patients had been a martyr to sciatica for years, and had tried innumerable remedies, including the application of electricity no fewer than two hundred times, while for a whole year he had adopted vegetarianism. Billroth injected the above remedy between the tuber ischii and trochanter, and within a day or two the pain was greatly relieved, and eventually it quite disappeared. It would be rash to conclude too much from these results, in the face of the intractability of neuralgia to medication, but if it really prove to be as efficacious as considered, hyperosmic acid will be a therapeutic agent of no mean value.—*Medical Record.*

MEDICAL STUDY IN EUROPE BY AMERICANS.—Dr. Charles S. Starr, President of the Medical Association of Central New York, at its annual meeting in May delivered an address upon an unusual but not uninteresting topic. Contrasting the facilities for the study of medicine of to-day with those of thirty years ago, he discerned a vast change. It is no longer necessary to go to Europe to find good medical schools. He opposed sending young men without practical experience to Europe, and recommended that the visit should be delayed until years would enable the student better to improve the opportunities for study of special courses. He preferred Germany to France, and particularly lauded Vienna.—*Medical Annals.*

REMARKABLE RECOVERY FROM A SEVERE ABDOMINAL WOUND WITHOUT ANTISEPSIS.—Dr. J. C. McMillan sends us the history of a man, an engineer, who had received a cut in the abdomen during a fracas. The cut was four inches long, near the umbilicus, and extended into the peritoneal cavity. The intestines were protruded, and the small intestine cut half through in one place. The patient had lain in the road for four hours before Dr. McMillan saw him, and the protruded bowels were covered with dirt. He was taken to a house, anæsthetized, the intestines cleaned with lukewarm water, the small intestine sewn up with silk suture, and the abdominal wound closed. The patient was well and discharged in two weeks.—*Medical Record.*

ACTIVE PRINCIPLE OF BOLDO.—Boldo leaves, which were introduced as a new remedy on this side of the Atlantic about five years ago, have, so far, not come extensively into practice. Sample lots of the fluid extract have been sold, but the medicine, which was recommended as an alterative in syphilis, has not apparently proved very satisfactory. The leaves have recently been examined by a French chemist, M. Chapoteaut, who has isolated a glucoside soluble in alcohol and benzine and insoluble in water. Its most marked property is that of an hypnotic, and, when subcutaneously injected, it increases the flow of bile.—*Canadian Pharmaceutical Journal.*

PATHOLOGY OF BRICKS.—A French exchange states that M. Parize has discovered swarms of bacteria in the very centre of a common house-brick. It is not stated whether tubercles were present or not.

NOTES AND QUERIES.

GASTROTOMY OR GASTROSTOMY.

TO THE EDITOR OF THE PHILADELPHIA MEDICAL TIMES.

July 3, 1884.

DEAR SIR,—Will you allow me to say, in reference to the remarks under the above heading in the number of the *Times* for June 14, 1884, that the term *gastrostomy* is simply an adaptation of the French *gastrostomie*, employed by Sédillot, and that the object of the operation is not the formation of an "os," but the establishment of a "stoma" in the gastric region?

Very respectfully,

JOHN ASHHURST, JR.

2000 W. DE LANCEY PLACE.

OFFICIAL LIST

OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U.S. ARMY FROM JUNE 22, 1884, TO JULY 5, 1884.

CLEMENTS, BENNETT A., MAJOR AND SURGEON.—Ordered to relieve Major Joseph P. Wright, Surgeon, of his duties as attending surgeon at the Leavenworth Military Prison, Fort Leavenworth, Kansas. Major Wright, on being relieved, ordered to report to the commanding general Department of Texas, for assignment to duty. Paragraph 7, S. O. 144, A. G. O., June 21, 1884.

HARTSUFF, ALBERT, MAJOR AND SURGEON (Fort Riley, Kansas).—Granted leave of absence for one month, with permission to apply for one month's extension, to take effect when his services can be spared. Paragraph 6, S. O. 130, Headquarters Department of Missouri, June 25, 1884.

MIDDLETON, J. V. D., MAJOR AND SURGEON.—Ordered to relieve Surgeon B. E. Fryer from duty as post surgeon, Fort Leavenworth, Kansas, on or before July 1. Paragraph 5, S. O. 133, Headquarters Department of Missouri, June 28, 1884.

DICKSON, JOHN M., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty as post surgeon, Alcatraz Island, California. Paragraph 3, S. O. 71, Headquarters Department of California, June 19, 1884.

GIRARD, A. C., CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for six months, with permission to go beyond sea. Paragraph 11, S. O. 148, A. G. O., June 26, 1884.

GIRARD, J. B., CAPTAIN AND ASSISTANT-SURGEON.—Ordered to relieve Surgeon W. E. Waters from duty as post surgeon, Plattsburg Barracks, Plattsburg, New York. Surgeon Waters, upon being relieved, directed to return to his proper station (Madison Barracks, New York). Paragraph 3, S. O. 131, Headquarters Department of the East, June 30, 1884.

BENHAM, R. B., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—From Department of Dakota to Department of Texas.

GORGAS, WILLIAM C., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—From Department of Texas to Department of Dakota.

Paragraph 8, S. O. 150, A. G. O., June 28, 1884.

WALES, PHILIP G., FIRST LIEUTENANT AND ASSISTANT-SURGEON.—From Old Fort Colville, Washington Territory, to Fort Cœur d'Alène, Idaho. Paragraph 3, S. O. 89, Headquarters Department of Columbia, June 23, 1884.

LIST OF CHANGES OF STATIONS OF NAVAL MEDICAL OFFICERS FROM JUNE 28, 1884, TO JULY 5, 1884.

Surgeon J. S. KNIGHT, placed on retired list.

P. A. Surgeon R. WHITING, detached from U.S. steam-ship "Vermont," ordered to Marine Rendezvous, New York.

Surgeon H. J. BABIN, detached from Marine Rendezvous, New York, ordered to U.S. steam-ship "Minnesota."

Surgeon H. M. WELLS, ordered for examination preliminary to promotion.

P. A. Surgeon G. P. LUMSDEN, detached from U.S. steam-ship "Pensacola" and placed on waiting orders.

Surgeon H. M. WELLS, detached from Naval Hospital, Brooklyn, ordered to U.S. steam-ship "Lancaster."

Dr. J. S. SAYRE, appointed assistant-surgeon, commission dated June 27, 1884.

Dr. F. J. B. CORDEIRO, appointed assistant-surgeon, commission dated June 27, 1884.